Vol. 2 No. 1 March 2, 1987

Satellite Times

The News Source for the Home TVRO and Cable Industries $1.50

FCC Chairman Mark Fowler makes a point during February 12th meeting in which the commission announced the results of its study on TVRO-related issues. See story below. Commissioners Dennis Patrick (far left), James Quello, and Mimi Dawson listen.

Chip Sources Identified; GI Begins to Strike Back

By Bob Scherman and Bill Barr

Even as General Instrument Corp. (GI) begins its first all out electronic offensive to deauthorize the computer chips which circumvent the VideoCipher scrambling system, several of the main sources of those chips have been identified.

For several weeks, *Satellite Times* has been investigating the sources of the chips which are in widespread distribution in the U.S., Canada, and several other nations.

All of the sources who provided information for this report spoke on the condition they not be identified or quoted.

According to the sources, the three biggest suppliers for the chips are:

- Rabbit Trading Co., which is headquartered on Providenciales Island in the British West Indies, is owned by publisher Bob Cooper, Jr. and three individuals active in DESUG (Digital Encryption Standard User Group).

Rabbit markets the so-called "Three Musketeers" chip, which decodes all encrypted signals when only

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INSIDE SCAN

Coop Questioned: *The NRTC's effort to market a TVRO programming package is drawing fire from the cable and dish industries—**page 4.***

Cancom South: *United Video will market four Detroit superstations to U.S. cable systems but not TVRO owners—**page 5.***

New Superstation Bill: *The chairman of the House copyright subcommittee plans on introducing another bill to clarify the dish owners' right to subscribe to uplinked broadcast stations—**page 5.***

New Hearings?: *The House Telecommunications Subcommittee may hold hearings on TVRO issues and the 1984 cable bill—**page 19.***

SBCA, Programmers Center Stage at '87 Las Vegas Show

By Bob Scherman

The TVRO industry was scheduled to gather in Las Vegas March 2, for a trade show which will feature several prominent firsts.

The show will mark the first expo staged by the Satellite Broadcasting and Communications Association (SBCA) in conjunction with STTI.

Several cable programming companies, including Home Box Office Inc., Showtime/The Movie Channel Inc., Turner Broadcasting System Inc., and ESPN will also exhibit for the first time at a home TVRO trade show.

Many in the TVRO industry are anxiously anticipating new announcements by the cable services about packages and discount subscription fees, believing lower priced programming is the key to boost dish sales.

In addition, several new models of integrated satellite receiver/decoders (IRDs) should be unveiled at the show by company's who have signed licensing agreements with General Instrument Corp. (GI) in recent months.

IRDs have been a "hot-topic" for several shows now, though only three companies are presently shipping units. There is growing talk within the TVRO industry that there is a shortage of the VideoCipher module.

But GI is expected to unveil its model 2400 IRD with a price tag to TVRO distributors of well under $600 at the

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SBCA/STTI Show Booth Guide—Pages 12 and 13.

Industry Debates Impact of Dumping

The amount of dumped product entering the TVRO market reached an all-time high in 1986 as the dish industry suffered through its worst year, according to many industry executives.

But there is widespread disagreement within the TVRO industry over the impact of dumping, and there are many who believe the selling of closeout, discontinued, or unwanted merchandise should not even be referred to as "dumping."

"It's [dumping] a constant problem," said Dick Gonzalez of DX Communications, a TVRO manufacturing company. Distributors who expend large amounts of cash on dumped product do not buy as much

Continued on page 21

Satellite Times begins second year of publication—see letter from the editor—page 6.

Tracker, Echosphere to Give Free TBS Package with IRDs

Houston Tracker Systems and Echosphere Corp. plan to give buyers of their integrated satellite receiver/decoders (IRDs) a free one year subscription to the programming package put together by Turner Broadcasting System Inc. (TBS).

The promotion was scheduled to begin March 1 and run until June 30, the companies said. The three companies were scheduled to hold a joint news conference at the SBCA/STTI Show in Las Vegas to announce the cam-

Continued on page 21

Gore Asks FTC TVRO Investigation; Results of FCC Dish Study Blasted

WASHINGTON—Sen. Albert Gore, Jr. (D-Tenn.) has asked the Federal Trade Commission to conduct an "investigation into the marketplace conditions" of the TVRO industry in light of the Federal Communications Commission's conclusion that no government intervention into dish industry matters is necessary.

Gore requested the investigation in a letter to FTC Chairman Daniel Oliver a week after the FCC announced its

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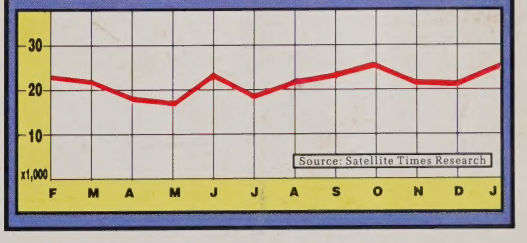
TVRO SALES

January	1987 Total	Total TVRO Sales
24,991	24,991	1,633,269



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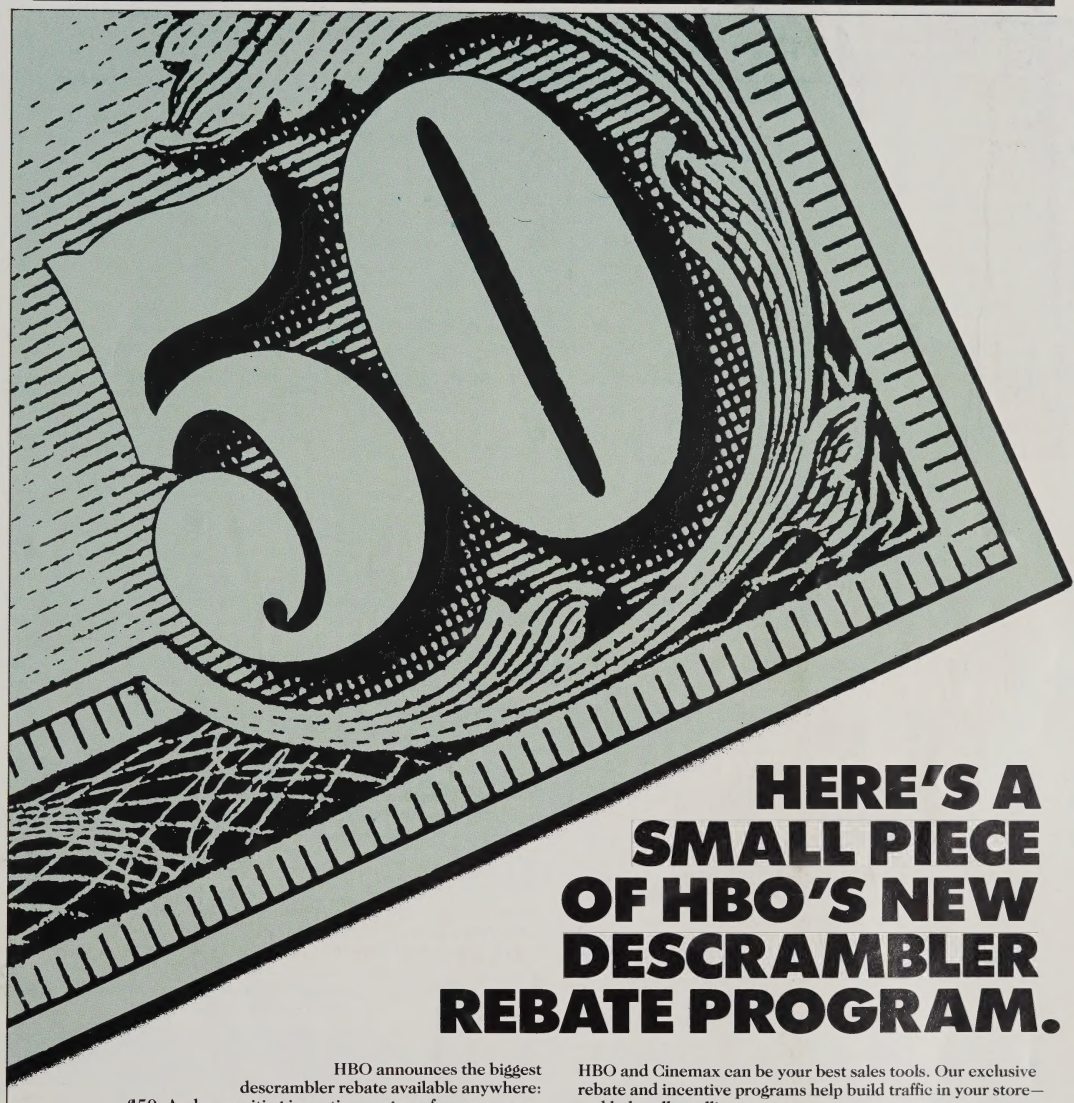

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HBO and Cinemax can be your best sales tools. Our exclusive rebate and incentive programs help build traffic in your store—and help sell satellite systems.

Watch for more big, new sales-building programs in the future. HBO's commitment to help you build traffic and sell satellite systems continues beyond the descrambler rebate and consumer incentive programs, beyond the point-of-purchase sales tool package. Working through a network of TVRO equipment distributors, HBO plans to implement new promotions and direct mail campaigns, and to offer additional point-of-purchase materials and telemarketing programs.

Get a piece of the Biggest Rebate and Big Consumer Incentives. Big Sales—and Big Profits—are easy with HBO.

For more information on the participating distributors in your area, call the HBO TVRO Hotline: 212-302-6242.

HBO cinemax

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NRTC Packaging Efforts Criticized

TVRO and cable industry executives have begun to criticize the National Rural Telecommunications Cooperative's (NRTC) attempt to market a programming package to dish owners.

Last month, the NRTC, which is affiliated with the National Rural Electrical Cooperative Association (NRECA), said it had reached agreements in principle with several programmers covering inclusion in the co-op's package (See *Satellite Times*, Feb. 11, 1987).

However, after the NRTC's claims were reported in *Satellite Times*, senior executives from several of the programming companies included in the list called this publication and said they were still negotiating with but had not reached any sort of agreement with the co-op.

All of the executives, saying they still hoped to work with the NRTC, spoke only on the condition they not be identified.

"I don't think they're even close" to signing packaging agreements, said one executive, referring to the NRTC.

Among the services NRTC may be incorrectly stating the status of its negotiations with are the USA Network, the Disney Channel, and Cable News Network and Headline News, the executives said.

In addition, the executives questioned why the NRTC included in the list of services several channels it was near agreement on—such as the Learning Channel and Black Entertainment Television (BET)—which are not close to or have yet to even indicate they would scramble their signals.

Moreover, the executives said, including home shopping services in any TVRO package is somewhat misleading since such channels do not plan to scramble. The NRTC said it was close to agreement with the Home Shopping Network and Travel Channel.

Jeff Almen, a spokesman for the NRTC, said the co-op wanted to have signed agreements with any service that might scramble its signal. The co-op would add services to its package as signals are scrambled, he said.

As for the shopping services, Almen said the agreements being sought covered special price breaks for the goods bought by dish owners who subscribed to the co-op's package.

Almen said he would have to defer all questions to the status of the NRTC's negotiations with programmers to Pat Thompson, of Access Corp., a Nashville-based firm. Thompson is now conducting all negotiations with the programmers on behalf of the NRTC.

But several programming executives interviewed for this story were highly critical of Thompson and his techniques. They said Thompson tried to close packaging deals by claiming to have "signed contracts" with their competitors.

The executives said Thompson refused to identify the services which the NRTC has signed contracts with. They not only questioned Thompson's claims, but how he could expect them to sign contracts for a package without knowing what other services would be sold along with their own.

Several programming executives said Thompson also misrepresented the nature and length of his arrangement with the NRTC.

One programming executive called Thompson's negotiating methods "less than ethical."

Another programming executive said, "I don't like the fact the NRECA didn't send us an official letter saying he [Thompson] was their designated negotiator and what [the co-op's] relationship with him was."

Several telephone calls to Thompson were not returned.

It also appears local members of the NRTC are exaggerating the status of the co-op's efforts to put together a package.

Several members of the TVRO industry said co-op members were claiming the NRTC had already signed packaging deals with Home Box Office Inc., Showtime/The Movie Channel Inc., and most of the other major programming services—and that the co-op would be able to offer all those services for around $10 per month.

One senior TVRO industry executive said a dish dealer in his area claims to have a tape recording of a telephone conversation in which a local co-op member makes inflated claims about the NRTC's package.

The NRTC's packaging efforts have always generated much controversy. Some TVRO industry members have said the co-op's motive in trying to become a packager was to obtain an edge in selling satellite hardware for its members.

Whether the new criticism of the NRTC is an effort to discredit the co-op's efforts by TVRO concerns and programmers—who do not wish to sell their service to the group—remains unclear. ❑

CBN Delays Full-Time Scrambling

CBN Cable Inc. will delay its implementation of full-time addressable scrambling from March 31 to Aug. 1, according to Tom Rogeberg, senior vice president of administration and operations.

CBN's new target date for full-time fixed-key scrambling is July 1, Rogeberg added. The company has been test scrambling in the fix-mode since Jan. 26, he said.

The delay in throwing the switch was due to the shortage of VideoCipher headend decoders for cable operators, Rogeberg said.

There has been a shortage of headend decoders for several months, though General Instrument Corp. (GI) has said it should be able to fulfill all orders in the near future.

A programming executive at another network estimated 7,000 headend decoders are on back order.

Speculation is also growing that other programmers will have to delay their scrambling dates because of the shortage of headend decoders. Most often mentioned in this category are ESPN, the MTV Networks, USA Network, and the Disney Channel.

A spokesman for the Disney Channel said he could not comment on the service's scrambling date. However, programming executives at other companies said they believed Disney already had all its headend equipment in place.

In recent weeks, a growing number of cable executives have become critical of Disney for its delay in implementation of full-time scrambling.

A spokesman for MTV said the service still planned to have its three channels scrambled by the end of the second quarter, but acknowledged the plans were "dependent" on the availability of headend decoders.

ESPN planned to begin test scrambling in March, according to a spokeswoman. USA's scrambling status could not be confirmed at press time. ❑

Cable Op Threatens HBO Suit Over TVRO Subs

A Colorado cable operator has threatened to sue Home Box Office Inc. because the service will no longer authorize TVRO subscriptions ordered through the local system.

Ouray Cable Television, billing itself as Satieovision, was selling HBO and Cable News Network to TVRO owners inside its Ouray, Colorado, franchise area and beyond.

On Dec. 20, HBO stopped taking programming orders from the cable system, saying the company was in violation of its licensing agreement by selling to dish owners outside its franchise.

Ouray, in its letter to HBO, states other cable operators are being allowed to sell outside franchise areas and HBO's actions have "severely restrained" its business.

Ouray also claims HBO is "offering, at no charge, VideoCipher unscramblers" to the firm's customers—though the letter does not make the reason for such actions entirely clear.

HBO spokesman Al Levy said the charge the company was giving VideoCiphers away to Ouray customers or anyone else was "absolutely crazy."

Levy confirmed HBO did take action against Ouray, though it continues to serve the company's cable subscribers.

At press time, Levy said Ouray Cable had not filed suit against HBO.

Telephone calls to Ken Schuman, who signed the letter to HBO, were not returned.

HBO and other programmers have taken action against other small cable operators who have attempted to serve dish owners outside franchise areas (See *Satellite Times*, March 19 and June 11, 1986).

Bob Caird, HBO vice president, direct broadcast, said the company has stopped taking TVRO authorizations from less than 10 cable systems. ❑

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United Video to Sell Cancom to U.S. Cable

United Video Inc.—common carrier for WGN, WPIX, and KTVT—plans to market the four Detroit network affiliate stations uplinked on Anik D1 by Canadian Satellite Communications Inc. (Cancom) to U.S. cable systems.

Cancom currently sells the signals to Canadian cable systems, TVRO owners, and a handful of U.S. cable systems using Oak Industries Inc.'s Orion scrambling system. Cancom has been actively seeking ways to expand its U.S. business for several months (See *Satellite Times*, Dec. 10, 1986).

Because the signals are scrambled with the Oak system, there is "not a chance" they will be sold to U.S. TVRO owners, said Roy Bliss, United Video's chief operating officer.

However, Cancom's signals are available to U.S. TVRO owners because of the underground distribution of Oak descramblers.

Bliss said cable systems will pay United Video approximately 25 cents for each signal, with discounts for bulk purchases.

Cable operators will be required to pay normal copyright fees for the signals, Bliss said. United Video said it anticipates having 100,000 subscribers to the service by the end of the year.

United Video now joins Satellite Broadcast Networks Inc. and Netlink USA in marketing network affiliates to cable systems in so-called underserved areas. ❑

WTCI, McCaw May Invest in Netlink

Western Tele-Communications Inc. (WTCI), a subsidiary of the nation's largest MSO, and McCaw Cable Communications Inc. are currently negotiating to buy part of Netlink USA—the company which uplinks six Colorado TV stations to cable operators and TVRO owners.

Cable operator Gordon Rock, chairman of Netlink's owner, Rock and Associates Inc., confirmed the talks have been "going on for some time," but he called the negotiations "very tentative" and said they involved "minority positions" in Netlink.

Rock said Netlink added its sixth station—a non-broadcast independent outlet from Aspen, Colo.—to the lineup of five Denver stations on Feb. 18 Netlink also dropped one of its Denver independents in favor of another affiliated with the Fox Broadcasting Co.

Rock said his company's TVRO subsidiary "will continue to go ahead" with its plan to serve TVRO owners and would conduct business at the SBCA/STTI Show in Las Vegas. ❑

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Letter From the Editor

With this issue, *Satellite Times* begins its second year of publication.

If a year's worth of issues could be summed up by pointing to one trend, then the pages of this publication would reflect the changing nature of the TVRO industry.

Indeed, it could be argued, the launch fo this publication is itself evidence of how the TVRO industry has evolved in the recent past.

Before the appearance of this publication, the TVRO industry—unlike its cable and broadcasting counterparts—was devoid of a publication providing coverage of late breaking news.

Before the launch of *Satellite Times*, the so-called TVRO industry trade press was largely comprised of publications whose commitment to covering the news in an objective manner seemed limited at best.

Moreover, until a year ago, straight forward coverage of the cable TV industry in the pages of a TVRO-oriented trade publication was a rarity.

To be sure, members of the TVRO industry's various anti-cable, anti-scrambling, and pro-black box factions have voiced criticism of this publication.

As one member of the TVRO industry told us several months ago, *Satellite Times* was "too accurate." In this individual's view, the worst year in the history of the TVRO industry was no time for the launch of a trade publication which was anything but a sycophantic cheerleader for the principal industry it covered.

However, we are pleased to report, the vast majority of those we have heard from this past year have applauded this publication's approach to covering the news.

For the most part, these readers and advertisers are those who are seeking to take advantage of the new opportunities presented by the birth of this nation's first direct satellite-to-home broadcasting industry.

Thus, as we begin our second year, we reaffirm our commitment to those readers who believe the basis for crucial business decisions is timely, accurate information.

We would modestly argue a comparison of our news pages to that of any other trade publication—whether it is TVRO, cable, or broadcasting oriented—would show the first coverage of many important stories and developments appeared in *Satellite Times*.

And in 1987, *Satellite Times* will continue its effort to be first with the news and information necessary to compete in an ever changing marketplace.

In addition to expanding our news coverage, *Satellite Times* plans to enlarge the scope of our efforts to track the growth of the TVRO hardware and programming markets.

Last summer, we began to publish monthly figures on TVRO hardware sales. We have now begun research which will net us definitive—and independent—figures on the number of TVRO programming subscriptions being sold and hope to have those numbers in print in the near future.

Adding to these two types of marketing information, *Satellite Times* plans to begin publishing results of extensive market research surveys which will gauge the habits and attitudes of both consumers and industry members—and assist industry companies in planning their business strategies.

As we begin our second year, I want to publicly thank those responsible for our success in year one. The entire editorial and production staff of Triple D Publishing in Shelby, N. Carolina,deserves much of the credit for this publication's success.

To Canadian bureau chief Bill Barr—a real "chip-off-the-old-block," a special thank you for all your hard, often difficult, work.

I would also like to thank former mile-high colleagues for their initial efforts.

I want to especially thank Doug Brown and Chris Schultheiss, owners of Triple D and *Satellite Times*, for their support, guidance, and friendship.

It should be noted that while Triple D is a proud member of the TVRO industry, the company's commitment to maintaining the editorial independence of *Satellite Times* has never waivered.

Finally, a heartfelt thank-you to our readers and to all those who have assisted *Satellite Times* in its news gathering efforts this past year.

In 1987, as we strive to make this publication even better, we welcome your comments, criticisms, and suggestions on how we can better serve you and the industries we cover. ❑

—Bob Scherman

Chaparral Cases Proceed Through Courts

Two lawsuits involving Chaparral Communications Inc., the California-based TVRO manufacturer, continue to proceed through the courts.

On Feb. 20, a short hearing was held in federal court in California on the suit between Chaparral and Cosmos Antenna Manufacturing Inc.

Cosmos sued Chaparral on Dec. 12, seeking to break its exclusive contract to supply antennas to Chaparral on the grounds Chaparral had not bought the amount of antennas it promised to and had breached several stipulations of the contract (See *Satellite Times*, Jan. 28, 1987).

Several weeks later, Chaparral, in filing its response, asked the court to prevent Cosmos from shipping antennas to other parties. Chaparral also asked the court to enforce a provision in the contract Chaparral claims mandates the two companies arbitrate any differences while conducting business (See *Satellite Times*, Feb. 11, 1987).

During the Feb. 20 hearing, the judge said he would rule on both companies' claims by early March, according to Robert Cartwright, counsel to Cosmos.

Chaparral faces another court date March 10, in its long standing patent infringement suit against Boman Industries, another TVRO manufacturing company.

Chaparral sued Boman in late 1983, claiming infringement on a utility patent it holds on the design of a polarotor and probe.

In Feb. 1986, a federal judge dismissed part of Chaparral's claims and ordered the company to pay part of Boman's legal fees (See *Satellite Times*, March 5, 1986).

Both sides claimed that ruling was a victory and have continued to press their cases. Spokesmen for the companies reiterated their determination to continue the quest for victory. ❑

Kastenmeier to Introduce New Superstation Bill

WASHINGTON—Rep. Robert Kastenmeier (D-Wis.), chairman of the House subcommittee with jurisdiction over copyright matters, plans to introduce another bill to clarify the ability of TVRO owners to subscribe to common carrier uplinked superstations.

Kastenmeier told *Satellite Times* the bill would be similar to the measure he and other lawmakers introduced last Congress. That measure narrowly passed the Judiciary Committee, but never reached the full House floor for a vote (See *Satellite Times*, Oct. 15, 1986).

The bill, which Kastenmeier said would likely be introduced later this month or in early April, would set up a mechanism for the common carriers of the superstations (or their agents) to collect copyright fees from TVRO owners and pass the money on for dispersal to copyright owners.

The new bill may be different from last year's version on some procedural matters relating to how copyright payments are received and then doled out, said Kastenmeier.

Asked if the new version would allow common carriers uplinking network affiliate stations to serve TVRO owners, Kastenmeier said, "I would not expect it to try to address that question."

Kastenmeier said he was "quite aware" of the lawsuits brought by ABC and CBS against Satellite Broadcast Networks Inc., which is selling uplinked network stations to TVRO owners.

But, he added, "I think it's a legal matter and I would assume the court will resolve it."

Kastenmeier, who was a principal author of the 1976 copyright bill which established the compulsory license for common carriers, declined to offer his view on the SBN-network cases or whether the 1976 bill envisioned uplinking of stations to TVRO owners.

"I would not want to go back to the legislative history and glean intent from that," he said. "I would not try to superimpose my 1987 judgement on that."

The broadcasting industry will probably continue to oppose any TVRO/superstation bill, said Kastenmeier.

"The NAB [National Association of Broadcasters] generally opposes it, even though we eliminated network television signals from being subject to superstation status," he said.

"But we want to explore if there is any way of mitigating their opposition," added Kastenmeier.

The new bill "could pass, but with some difficulty," he said. "It does have support of the motion picture industry, the [common] carriers, and the cable industry." (And, of course, the TVRO industry.)

Kastenmeier said he expects his subcommittee to take the lead on any new legislation, noting the Senate has not expressed much interest in the matter to date. ❑

Gannett Asks SBN to Stop Uplinking Atlanta Station

Gannett Communications Inc., owner of the Atlanta NBC affiliate being uplinked by Satellite Broadcast Networks Inc. (SBN), has sent a so-called cease and desist letter asking the common carrier to stop transmitting the station.

SBN received similar letters from Capital Cities/ABC Inc. and CBS Inc. (and their affiliates) before both filed suit against the firm charging service to TVRO owners was a violation of copyright law (See *Satellite Times*, Jan. 28 and Feb. 11, 1987).

Those suits have been combined into one case, said SBN President Kazie Metzger. A procedural hearing was held in federal court in New York on the case on Feb. 20, she added.

According to Metzger, neither network requested the court consider a preliminary injunction against SBN. "They say all this great damage is being done [by SBN's activities], and yet they didn't ask for a preliminary injunction," she said.

The court set a deadline of May 1 for receipt of initial 10 page statements of positions by all sides, Metzger said, and ruled the parties would meet on May 8 to informally discuss the next step in the case.

If Gannett sues SBN, several attorneys said, it is likely it would join the ABC/CBS case. However, the Gannett letter claimed the business of its Phoenix station was being harmed by the satellite importation of its Atlanta station—leaving open the possibility Gannett would file a separate case in Arizona.

A lawyer for the Washington firm of Pierson, Ball & Dowd, which represents Pacific and Southern Broadcasting Co. Inc. (the Gannett subsidiary which owns the stations), declined to comment.

At press time, word continued to circulate that NBC was itself preparing a lawsuit against SBN, though the reports could not be confirmed.

Meanwhile, the common carrier uplinkers of the present cable superstations are closely following SBN's legal battles.

Representatives of the three companies said an SBN loss would require Congress to act or mean an end to superstation service to TVRO owners.

"It would certainly be detrimental to us if they [SBN] lost, no question about it," said Roy Bliss, United Video Inc.'s chief operating officer. "But I haven't been too concerned because I don't think they'll lose."

United Video, uplinker of WGN, KTVT, and WPIX, currently serves TVRO owners.

WOR's carrier, Eastern Microwave Inc., is scrambled and does not service TVRO—although that stance is about to change with the launch of the Turner Broadcasting System Inc.'s TVRO package (see story, page one.)

TEMPO Enterprises Inc., which uplinks WTBS, still anticipates Congressional action, said Sel Kremer, executive vice president of operations. "If Congress refuses to clarify [the law]," he said, "we're in a rock [and a] hard [place] situation." ❑

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Show

Continued from page 1

show. GI may also announce a joint hardware/software package promotion with the Disney Channel.

The SBCA was scheduled to open the show with a two-day board meeting, beginning on Feb. 28. "It's going to be a very, very important meeting," said association President Chuck Hewitt. "It's the meeting in which the direction of our activities and our resource [allocations] will be decided. You might say it's the end of our organizational side and the beginning of the policy and activity side."

With so much at stake at the board meeting, several board members said, the various factions which comprise the SBCA may seek to steer the group in different directions.

With operating funds limited to approximately $1

Continued on page 22

Cable Exec: NFL Will Stay with Networks

WASHINGTON—Cable television will not garner a piece of the National Football League's (NFL) television contract for at least three years, according to William Aber, vice president and general manager of Home Team Sports (HTS), a regional sports network in the Washington area.

During a speech to the Washington Metropolitan Cable Club, Aber said the lobbying efforts by the three broadcast networks, aimed at preventing a contract from being awarded to cable, have been "intense."

In addition, Aber said, cable also faces a perception problem with the NFL. "The NFL is concerned about the issues of limited cable distribution and viewership," he said.

Aber noted that several cable networks have expressed interest in bidding for the rights to the NFL including WTBS, ESPN, and Home Box Office. (A group of large MSOs has also joined together to launch a joint effort to win a piece of the NFL contract.)

But, he also noted that for the first time cable was not automatically rejected by the NFL. "If not this time, then [a contract will be offered to cable] in three years," said Aber.

HTS is owned by Group W Satellite Communications Inc.

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Discovery Airs Soviet Programs

WASHINGTON — Capitalizing on the controversy over the airing of ABC's Amerika broadcast the week of Feb. 15, the Discovery Channel programmed 66 hours of live and taped television from the Soviet Union to cable and TVRO viewers.

Discovery originally had planned to use the facilities of Orbita Technology Corporation to downlink and decode the Russian satellite signals, but was forced to work with the Comsat/Intelsat system after Orbita ran into regulatory problems with the Federal Communications Commission (FCC).

John S. Hendricks, Discovery's chairman and chief executive officer, told reporters here that more than 35 million people were expected to view the week-long programming. He said the network also offered its signal to cable systems that did not regularly carry the science and education network.

The programming ranged from live Soviet evening news (with translations and captions provided by Discovery) to taped music videos, documentaries, military programs, Russian aerobics, and children's shows.

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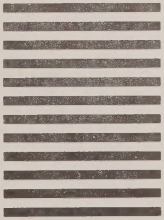

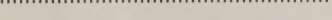

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2) Annual sales volume: a) under $100,000 b) $100,000 to $499,999 c) $500,000 to $999,999 d) $1,000,000 to $4,999,999 e) $5,000,000 or more

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3	18	33	48	63	78	93	108	123	138	153	168	183	198	213	228	243	258	273	288	303	818	333	349	364
4	19	34	49	64	79	94	109	124	139	154	169	184	199	214	229	244	259	274	289	304	319	334	350	365
5	20	35	50	65	80	95	110	125	140	155	170	185	200	215	230	245	260	275	290	305	320	335	351	366
6	21	36	51	66	81	96	111	126	141	156	171	186	201	216	231	246	261	276	291	306	321	336	352	367
7	22	37	52	67	82	97	112	127	142	157	172	187	202	217	232	247	262	277	292	307	322	338	353	368
8	23	38	53	68	83	98	113	128	143	158	173	188	203	218	233	248	263	278	293	308	323	339	354	369
9	24	39	54	69	84	99	114	129	144	159	174	189	204	219	234	249	264	279	294	309	324	340	355	370
10	25	40	55	70	85	100	115	130	145	160	175	190	205	220	235	250	265	280	295	310	325	341	356	371
11	26	41	56	71	86	101	116	131	146	161	176	191	206	221	236	251	266	281	296	311	326	342	357	372
12	27	42	57	72	87	102	117	132	147	162	177	192	207	222	237	252	267	282	297	312	327	343	358	373
13	28	43	58	73	88	103	118	133	148	163	178	193	208	223	238	253	268	283	298	313	328	344	359	374
14	29	44	59	74	89	104	119	134	149	164	179	194	209	224	239	254	269	284	299	314	329	345	360	375
15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	346	361	376

Dealers Can NYC Uplink Idea

A group of New York State TVRO dealers has decided not to proceed with its plans to uplink the three major New York City independent broadcast stations for sale to dish owners and cable subscribers.

The leader of the group, Joe Iozzi, of Sync Satellite Systems Inc., Hancock, N.Y., said of the plan: "It's dead in the water."

The New York Association of Satellite Television Dealers and Iozzi's company were principal forces behind the effort, which Iozzi said was intended to spur TVRO hardware sales by making more programming available to dish owners at a "reasonable price" (See *Satellite Times*, Sept. 3, 1986).

The failure of Congress to pass copyright legislation designed to clarify dish owners' rights to subscribe to uplinked broadcast stations was among the reasons the plan stalled, said Iozzi.

In addition, he said the demise of American Wireless Systems Inc.—which had planned to uplink WTBS and WGN to cable operators and TVRO owners—also played a role. American Wireless and the New York dealers had discussed a cross marketing arrangement.

Finally, Iozzi said, Rock Associates Inc., the cable operator currently uplinking five Denver broadcasting stations, has experimented doing the same with WNYW, one of the New York stations the group had planned to transmit.

"So you start adding them up," he said, referring to the problems, "and it doesn't look too good."

Iozzi said his company and the dealer association had invested some money to explore the uplinking idea, but he declined to reveal the amount involved.

He said the dealers had concluded any ongoing discussions about entering the programming business. While the dealers do not anticipate trying to resurrect their plan in the future, he added, "We're always looking to reduce the price of programming" to the TVRO market. ❑

HDP Launch Put On Hold

Home Dish Programming Inc. (HDP), a Sanborn, Minnesota firm, has announced it will not be able to meet its March 1 target launch date for the movie services it planned to sell to TVRO owners because of "a lack of subscribers."

HDP was accepting $90 subscription fees and said the money it had received would be refunded within 30 days.

The company said it would continue its efforts to start one or two unscrambled, advertiser supported services by the end of the second quarter. ❑

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Satellite Stocks Zapped by Market in 1986

By Blaine Roberts

One of the big objections to the Reagan administration's Star War's (or SDI) program is the possibility of enemy "killer satellites" blowing our fancy hardware out of orbit. Judging from the carnage in satellite stocks, it appears such "killers" are already in geosynchronous orbit directly above Wall Street.

Satellite television equipment suppliers suffered a horrendous 1986. Indeed, it would be difficult to even construct a TVRO-only index, since many TVRO stocks filed for protection from their creditors under Chapter 11 of the Federal Bankruptcy Act.

Brooks Satellite Inc., Pentec/MTI, Birdview Satellite Communications Inc., and ABC Birdfinder all disappeared from the national over-the-counter quote list—in some instances because their net worth did not meet minimum requirements.

Currently, these four stocks trade only on the "pink sheets," and the sum of all their stock prices would barely break $1 per share.

A recent check of the pink sheets found Birdfinder's price at 75 cents, bid, and 88 cents, asking price; Birdview at 5 cents, bid, and 15 cents, asking price; Brooks at 1 cent, bid, and 6 cents, asking price; and Pentec at no bid, and 1 cent, asking price.

Just about the only "pure sales" home satellite television stock left is Pico Products Inc., which trades on the American Stock Exchange.

Pico's recent bidding and asking prices sat at $2 and $2.12.

As a group, the stocks are down more than 50 percent from a year ago. In the future, tracking home television satellite stock will be made easier by simply checking the quote on Pico Products, the survivor.

The financial picture is not much brighter for the other satellite suppliers. Satellite data equipment supplier Equatorial Communications sunk below $3 per share from a high of $11 last year and $20 the year before.

Much smaller data suppliers also fared poorly. Satellite Information Systems Inc. sells at 18 cents per bid, which is down from a high of 50 cents last year. Satellink sells at 25 cents per bid, which is down from a high of $40 last year.

Certainly, the whole satellite communications industry was a disaster last year. It was a particularly bad year for telecommunications stocks overall—especially those companies which specialize in alternative (or so-called bypass) distribution equipment.

Such vendors suffered from competition from fiber optics, lower pricing of traditional telephone line service, and of course, the shut down of America's space program.

According to Donaldson, Lufkin and Jenrette (DLJ), the New York securities firm, the index for stocks in the bypass industry fell 10.5 percent in 1986. This compares to a 15 percent gain for the year in the Standard and Poor's 500 stock index.

For this year, DLJ is currently favoring two industry stocks: Scientific-Atlanta Inc. (SA) and General Instrument Corp. (GI). But before you get excited, it should be explained why these two stocks are projected to do better.

The reason is that DLJ sees an increase in the demand for SA and GI's cable TV equipment. The irony is the best that DLJ can say about some satellite related suppliers is they've got a nice chunk of cable. (Though, of course, SA recently pulled out of the home TVRO business and is now concentrating on the commercial marketplace.)

Thus, the machinations of the marketplace and cable television continue to dish it out to satellite television companies.

By the way, there is one company with *satellite* in its name that is off to a good start this year. The stock has moved from $5-1/4 to $7-3/8 since Jan. 1, a 40 percent gain. Watch the next issue for details. ❑

Blaine Roberts is a financial analyst with the investment firm of Morgan, Olmstead, Kennedy, and Gardner of La Jolla, California. The opinions in this column are not necessarily those of Satellite Times or Triple D Publishing.

Satellite Times 100

New York Stock Exchange

Symbol	Company	High	Low	Close	Chg.
ANX	Anixter Bros. Inc.	13¾	13¾	13¾	—
AVT	Avnet	36¼	36¼	36¼	– ⅛
CCB	Capital Cities (ABC)	324½	323½	323½	1
CBS	CBS Inc.	156⅜	156¼	156⅜	– 1¼
CNT	Centel Corp.	64⅞	64⅝	64⅝	¼
KO	Coca Cola	45⅝	45¼	45⅜	+ 2⅝
CQ	Comm. Satellite	33½	32⅜	33½	+ 1¼
CCN	Chris-Craft Ind.	20¼	20	20⅛	+ ¼
CTC	Continental Telecom	32½	32¼	32½	+ ½
DEC	Digital Equipment Corp.	145⅝	142⅛	N A	N/A
DIS	Walt Disney Productions	59⅛	58¾	58¾	⅜
DJ	Dow Jones & Co. Inc.	54¾	54⅛	54¼	– ⅛
DNB	Dun & Bradstreet Co.	125	124⅜	124⅞	– ⅛
EK	Eastman Kodak Co.	81¼	80¼	80¼	– 1
GCI	Gannett Co. Inc.	47⅜	46¾	46¾	¾
GE	General Electric	101	100⅜	100⅝	+ ⅛
GRL	Gen. Instrument Corp.	26⅝	26⅜	26⅝	⅛
GTE	GTE Corp.	42⅛	41⅞	42⅛	+ ⅛
GW	Gulf & Western Ind.	76½	76½	76½	¼
HRS	Harris Corp.	38⅞	38¾	38⅞	– ⅛
HCI	Heritage Comm.	32⅞	32⅜	32⅞	+ ⅛
KRI	Knight Ridder Inc.	55¾	55¼	55½	+ ⅛
MAI	M/A-Com Inc.	13⅞	13	13⅞	+ ⅛
MCA	MCA Inc.	42⅜	42	42⅛	+ ⅛
MOT	Motorola Inc.	49½	48⅜	48⅜	– ⅞
NPH	N. Amer. Phillips Corp.	43½	43¼	43¼	– ¼
OAK	Oak Industries	1⅛	1⅛	1⅛	—
PIO	Pioneer Electronic Corp.	32½	32¼	32⅞	+ 4⅛
PLA	Playboy Enterprises	10⅜	10¼	10¼	+ 1⅜
ROL	Rollins Communications	17¾	17¾	17¾	+ ¼
SFA	Scientific-Atlanta	15	14⅞	14⅞	– ⅛
SNE	Sony Corp.	22⅜	22⅜	22⅜	– ¼
TFB	Taft Broadcasting	126½	125	126½	+ 1¼
TAN	Tandy Corp.	54½	53½	53½	– ¾
TEK	Tektronix Inc.	40	39¾	39¾	– ¼
TL	Time Inc.	81⅛	81½	81½	+ ⅛
TMC	Times Mirror Co.	81⅝	81	81½	+ 4¼
TRB	Tribune Co.	76¾	76¼	76¼	– ½
UCT	United Cable TV	31¼	31	31⅛	+ ⅜
VIA	Viacom Intl.	45¼	45¼	45¼	+ ⅛
WCI	Warner Communications	29⅝	29	29¼	+ ⅜
WU	Western Union	3⅞	3¾	3¾	– ¼
WX	Westinghouse Electric	64½	64⅛	64⅛	– ¼
ZE	Zenith	24	23⅞	23⅞	– ⅛

American Exchange

Symbol	Company	High	Low	Close	Chg.
AAR	Adams-Russell Inc.	54½	53½	53½	– ¾
ACN	Amer. Cablesys. Inc.	18⅜	18¼	18¼	+ ¾
CVC	Cablevision Sys. Inc.	25⅛	25	25⅛	+ ⅛
CEC	Cetec Corp.	6¼	6	6	+ ⅛
HSN	Home Shopping Netwrk	28½	27½	28⅜	+ ⅞
LT	Lorimar-Telepictures	17⅝	17⅜	17⅝	+ ⅛
MEGA	Media General Inc.	48¾	48⅜	48⅜	—
NYTA	New York Times Co.	40¼	39⅝	40¼	—
PPI	Pico Products Inc.	3⅛	2⅞	2⅞	– ⅛
RMS	RMS Electronics	2⅜	2⅜	2⅜	– ⅛
TBS	Turner Broadcasting Sys.	19	18⅞	18⅞	– ½
TDS	Telephone & Data Sys.	23⅜	22¾	23¼	+ ⅜
UNV	United Video	8¾	8¾	8¾	+ ⅛
WPOB	Washington Post	167	167	167	—

NASDAQ

NASDAQ Symbol	Company	High	Low	Close	Chg.
AMTV	AM Cable TV Ind.	N/A	N/A	N/A	N/A
ATCMA	Amer. TV & Comm.	21	20⅞	21	+ ⅜
AVAK	Avantek	18⅜	18⅛	18⅛	—
BFTV	Birdfinder	5	½	N/A	N/A
BTSSU	Brooks Sat. Uts.	5	⅝	N/A	N/A
BVSC	Birdview Satellite	2⅜	⅜	N/A	N/A
CAMP	Calif. Amplifier	1⅛	⅞	1	—
CATV	Cable TV Ind.	2½	2½	2½	+ ¼
CCBL	C-Cor Electronics	9	9	9	+ ¼
CGRD	Cableguard	2	⅝	N/A	N/A
CNMW	Cincinnati Microwave Inc.	8⅝	8⅝	8⅝	– ⅜
CMCO	C.O.M.B. Co.	22⅞	22¼	22¼	· ½
CMCSA	Comcast Corp.	21⅞	21⅜	21¾	– ⅛
CSII	Commun. Sys.	8½	8¼	8¼	– ¼
CVGI	Congress Video	8⅛	1⅛	1⅛	– ⅜
CVSI	Compact Video	8⅜	3⅝	3⅞	—
DYNA	Dynascan	15	14¾	14¾	+ 2
EQUA	Equatorial Comm.	4½	4½	4½	– ¼
FNNI	Financial News Net	13½	13⅛	13⅛	– ¼
HYTK	Hytek International Corp.	N/A	N/A	N/A	N/A
JOIN	Jones Intercable	15½	15¼	15½	+ 4
JTWO	J-2 Corporation	5	2½	4	+ ⅝
JSCC	Scott Cable	18¾	18¼	18¼	—
KING	King World Prdctns	15¾	15¾	N/A	N/A
KREN	King's Road Entrmnt	3½	3¼	3½	—
MALR	Malrite Comm.	11¾	11¾	11¾	– ⅜
MCDY	Microdyne Corp.	4⅛	4⅛	4⅛	+ ⅛
MFCO	Microwave Filter	2⅛	2⅛	2⅛	—
NINV	Norsat Int'l	⅜	1⅛	N/A	N/A
ORPCW	Orion Pic. Wts.	4⅛	1⅛	3	– 1⅛
QVCN	QVC Network	17½	16¾	16¾	– ¾
RCOT	Recoton Corp.	7⅝	7½	7⅝	+ ⅛
RCCAA	Rogers Cablesys. A	14½	14⅛	14⅛	· ⅜
RGCY	Regency Elec.	7	6⅞	7	—
SCRP	Scripps Howard Bdcst	88	85	86	– 2
SLNK	Satellink	⅝	5⁄32	¼	· 1⅛
SMNI	Satellite Music	5¼	5¼	5¼	– ⅛
SPDY	Spectradyne	20	19¾	20	¼
TCAT	TCA Cable TV	21	20¼	20½	– ½
TCOMA	Tele-Communctns	32½	31⅞	32	– ⅛
TLCR	Telecrafter	5⅜	5¼	5⅜	+ ⅛
TLMTB	Telemation	N/A	N/A	N/A	N/A
UACIA	United Artist Comm	22¼	22⅛	22¼	—
USECW	Univ. Sec Instr. Wts.	3	½	1¼	– ⅛
USEC	Univ. Sec Inst.	4⅞	4¾	4¾	· ½
USECU	Univ. Sec. Instr. Uts.	19¼	7½	10¼	– ¼
WVTK	Wavetek	8¼	8¾	8¾	+ ⅛
WWTV	Western-World TV	3¾	⅝	1½	– ⅛

GI Sells Prodelin Division

General Instrument Corp. (GI) has reached an agreement to sell its Prodelin satellite antenna business to current GI executives Larry Bowman and Gary Kanipe.

Though the sale price was not disclosed, a source familiar with the sale said the deal was worth "considerably less" than the estimated $15 to $20 million M/A-Com Inc. had invested in the division before selling it to GI last fall along with its other cable and TVRO-related businesses.

GI said the new company, Prodelin Corp., will focus its efforts on the very small aperture terminal (VSAT) and other commercial markets rather than on the home TVRO field.

Technology and other materials related to L-band antenna and VideoCipher products were not included in the sale, GI said.

It is unclear whether GI will cease marketing complete TVRO systems. Though GI spokesman Ed Kearney said the company now planned to stop marketing complete systems, other company executives said the firm may continue to do so.

According to these executives, it is possible GI may buy Prodelin's remaining stock of TVRO antennas or enter into a private label agreement with an outside antenna manufacturer.

The sale, which was subject to execution of a final agreement, was scheduled to close by Feb. 27, GI said.

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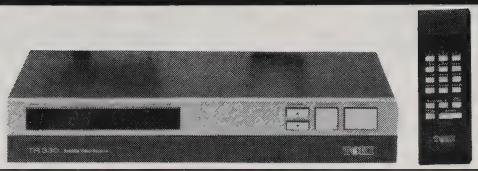

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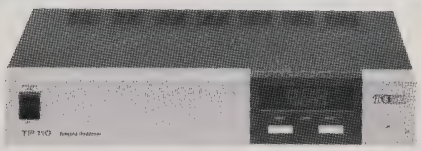

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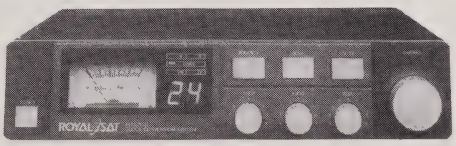


- Detent Tune
- 950-1450 MHZ

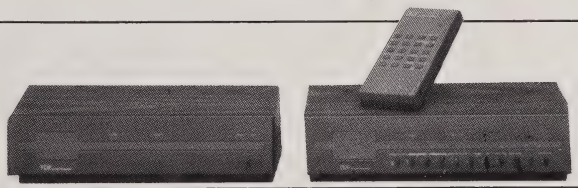
$119.00

ORSAT®
PHOENIX
300 SLR

- 80° LNA
- Block D/C
- 18″ Warner

$399.00

TDP ELECTRONICS
500/501



- 85° LNB
- 18″ Warner

$299.00

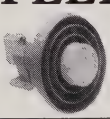
ORSAT®
80° LNA
$39.00

UNIDEN
75° LNB
$89.00

MTI
110° LNA
$24.00

AVANTEK
950 - 1450
Block D/C
$39.00

FEEDHORN



$16.50 12-LOT
$19.00 1-LOT

WARNER
18″ Actuator
Reed Sensor
$79.00

ODOM 10′ 4 - Panel Aluminum Dish — $199.00 3-LOT

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American Netlink	1235
Andersen-Scientific	1310
After Dark Video Production	526
Amway Corporation	1345
Andersen Mfg.	712
Astra	232
Astro Distributing	1211
Astroguide Satellite	Dish Farm
Astro Industries	604
Augustin Satellite Systems	1312
Automation Tech	324
Avcom of Virginia Inc.	727
Baird Satellite Supporting Sys.	826
Birdview Satellite	632
Burton Satellite	420
California Amplifier, Inc.	329
CBN Cable Networks	1430
Centauri Earth Systems	Dish Farm
Channel Master	820
Chaparral Communications	720
Chief Industries	126
Cincinnati Microwave	408
CommTek Publishing	916
Computer Antenna Design	1527
Consolidated Cable Int.	915
CT Systems, Inc.	1203
Delhi Antenna Products	1420
Delta Satellite	600
DH Satellite	708
Diamond Perforated Metals	1216
Diamond West Service, Inc.	1010
Digitron Communications	1335
Diversified Industries	931
DSI Distributing	825
DX Communications	220
Echosphere Corporation	1327
Electronic Digital Controls	921
Emperor	716
Equus Communications, Inc.	1515
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Feco Satellite	323
Fortuna Communications	320
Gardiner Communications	1201
General Instrument	1741
Gourmet Entertaining	603
Hammerblow Corporation	122
High Frontier Distributing	422
Home Box Office, Inc.	1633
Home Satellite Services	1731
Hoosier Electronics, Inc.	704
Houston Tracker Systems	1427
International Electronic	316
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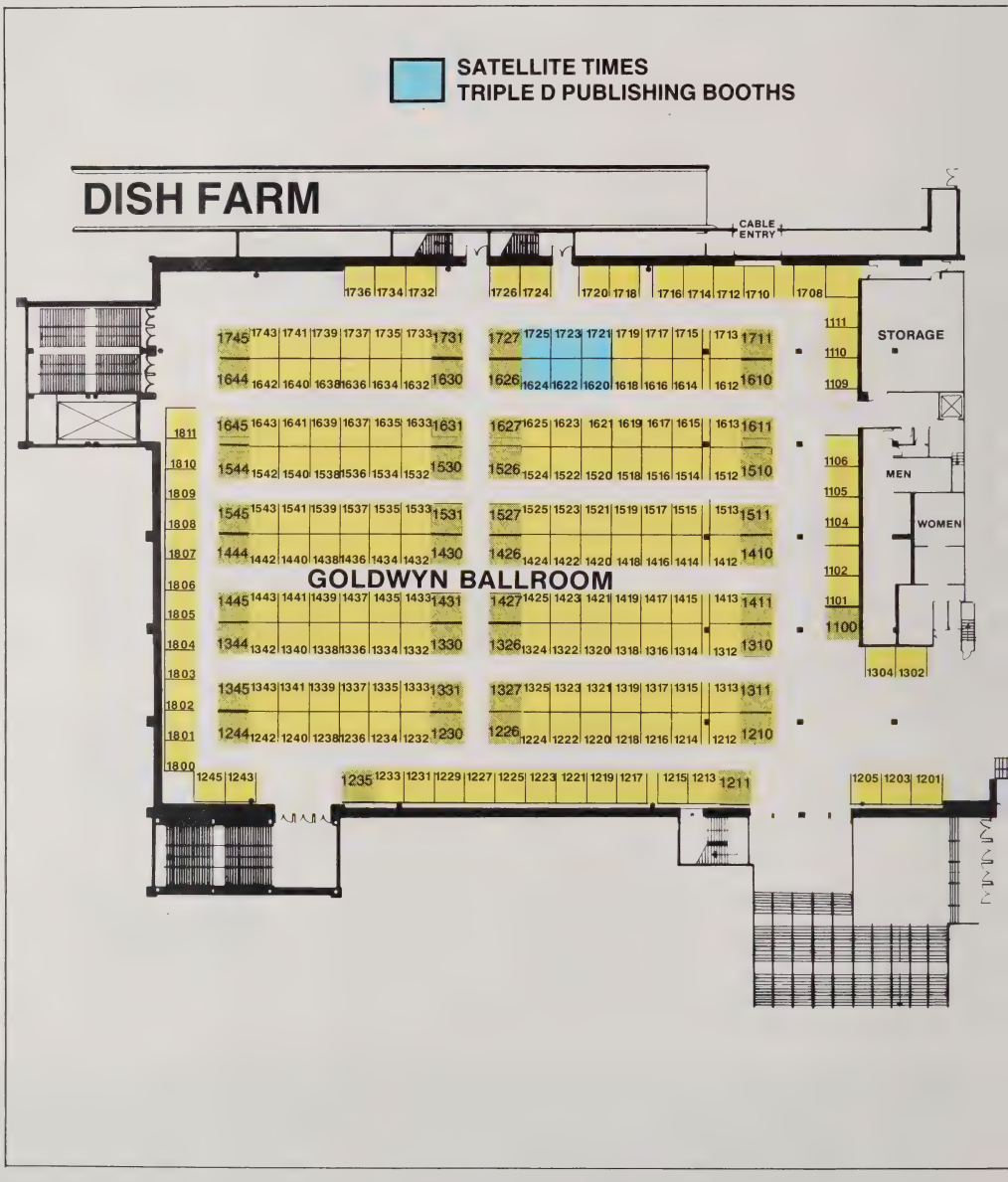
Janeil Corporation	332
Jensen Metal Products	1426
Kaul-Tronics, Inc.	832
Kenwood Electronics	1645
Laux Communications, Inc.	1745
Lunar Industries	1102
Luxor (N.A.)	608
Mainline Equipment Co.	1317
McMont Corporation	615
Merrimac Satellite	Dish Farm
Microwave Systems Eng.	1215
Multiplex Technology, Inc.	428
Mutual Of Omaha	116
National ADL Enterprises	1315
NSPN	1422
New World Satellite Equip.	1014
Nexus Engineering Corporation	504
Norsat International, Inc.	1410
Northern Satellite Corp.	1518
Nostalgia Channel Fan Club	1413
Novatek	1007
Nuts & Bolts	1214
Orbitron	804
O'Rourke Brothers Distributing	800
Panararex Electronics	925



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FREE S-10 1987 PICKUP

or

$5500 IN CASH!!!

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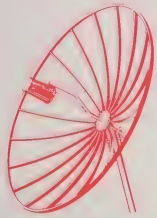
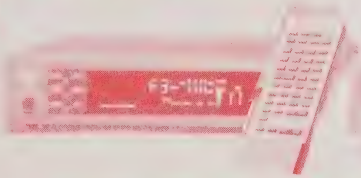
Just $1,999.95 each



10' Adm Dish, Gearbox



SR110/65° LNB/Pico Feed

Video Recorder Monitor & Tuner

Buy 5 Systems & Get $2000 in CASH or
Buy 3 Systems & Get $500 in CASH plus GE console TV

DRAKE

70° LNA
$59.95

MTI

100° LNB
$39.95 10 Lot

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UST 7000/18" Arm
$499.95
With Purchase Satron LNB

UST 710
$169.95
4 Lot

GENERAL ELECTRIC

$289.95
$20 Consumer Rebate
VCR 9-7115

$159.95
8-Box 13" TV

8' Stereo System

$299.95 Includes
SR-3500 Stereo Rec.
75° Hytek LNA
BDC Pico Rotor
8' Kaultronics Dish

Amplica, Inc.
A COMSAT COMPANY

Replacement Arms for 300A
$99.95

300A w/Arm
$399.95

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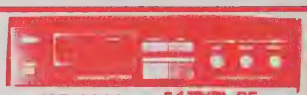
HOUSTON TRACKER VIII
75° LNB/BJ 18"
Call For Special Price!

$379.95 4 lot
VC-2100 Decoder

UST 710
$169.95
4 Lot

uniden
Satellite Television Systems

UST 7000
$499.95
With Staron LNB Purchase



UST 2000 $129.95
With Purchase 70° Hytek LNA

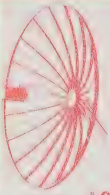
	1 Lot
UST 2000	159.95
UST 5000	189.95
UST 5000/75° Satron LNB	264.95
UST 6000	289.95
UST 6000/75° Satron LNB	354.95
UST 7000/18" Arm	589.95
UST 9000	689.95

	1 Lot
UST 441 75°	69.95
UST 441 85°	64.95
UST 550	49.95
UST 911 75°	89.95
UST 55	74.95
UST 88	59.95

	1 Lot
UST 502	30.00
UST 524	114.00
UST 770	189.95
UST 710	169.95
UST 730	234.00

UST 7000 Demo's
$399.95

FREE CAR STEREO WITH EACH UNIDEN RECEIVER PURCHASED UNTIL APRIL 30th!



$499.95 4 lot
LSR/75° LNB/18" SuperJack
8' Kaultronics Dish, Pico Feed

SR Block Combo
75° LNB, 24 JGS
$499.95

STS

SR110/75° LNB/24" JGS
$589.95

SR-110	469.95
SR-105	189.95
SR-110 Remote	49.95
SR-110 Remote/Res II	74.95
Dual Freq. Feed	279.95
VCR/Tuner/Monitor	899.95
10' Dish/Gear Box	349.95

LSR/75° LNB/18" SuperJack
$399.95

LSR	279.95
BDC	39.95
75° LNB	99.95
60° LNB	119.95
18" Super Jack	74.95
24" Arm JGS	89.95
RCS/LSR Remote	64.95
SRb Slave	139.95

! BUY 10 SR110'S GET VCR/MONITOR/TUNER FREE !

Tracker II/18" BJ
$164.95 4 lot

TRACKER III IRD

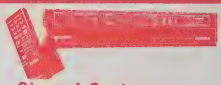
		1 lot
Tracker VIII - 18" 75° LNB	CALL FOR PRICE!	
Tracker VII - 18" 75° LNB	COMBO'S	1195.95
Tracker V - 18" 75° LNB		729.95
Tracker II III - 18" 75° LNB		489.95
Tracker II III Rec Only $199.95	85° LNBF	229.95
	75° LNBF	239.95

Tracker II IRD - Available Soon!

POSITIONERS	1 lot	4 lot
Tracker II - 18" BJ	169.95	164.95
Tracker III - 18" BJ	234.95	229.95
Tracker IR - 18" BJ	219.95	214.95

Add $20.00 for 24" JGS Arm/or Remote Upgrade Kit

CHAPARRAL
COMMUNICATIONS



Sierre I System
$699.95
Includes: 18" SuperJack/70° LNB/ Pico Feed - *Add $125.00 for Sierre II*

Pol E
$37.95 8 lot

Pol 1 A/S	49.95
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Pioneer Kit	139.95
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Dual Feed	59.95
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Poloramp 85°	114.95
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Cheyenne	434.95
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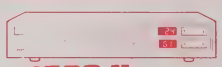
Remote Eye	54.95
Pol I Motor	22.50
Gold Ring	3.50
Chap BDC	59.95

"NEW" 2400 IRD
$1199.95

DRAKE

$579.95

ESR 524/APS 524/24"
JGS/60° DRAKE LNB



$699.95
924i/70° Satron LNB/24" JGS

ESR 924i	564.95
ESR 524	269.95
ESR 324S	199.95
ESR 324 Single Converstion	149.95

ESR 324/POI 1 AS/60° LNA
SPECIAL $269.95

APS 524/24" JGS	249.95
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Ku LNB	139.95
2-Way Splitter	14.95
4-Way Splitter	29.95

70° LNB	99.95
60° LNB	114.95
60° LNA	79.95
BDC-24	59.95
Tuning Meter	26.50

Drake 70° LNA's $59.95

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DX Communications, Inc.

DX ANTENNA

DX800/79° LNB/24" JGS $749.95

SPECIAL PKG. $499.95

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DSB 800	619.95
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DSB 700	289.95
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DSA 510 Ku LNB	159.95
DSB LNB	99.95
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DSB 300 East West Ant. - Position 18" Arm	149.95
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DS-843 Filter	179.95

Quality Equipment at Excellent Pricing!

Panasonic

C2000/PAP400
18" Super Jack/75° Satron LNB
$469.95

C-2000 A $249.95
PAP 400 $99.95

C2600/600 $599.95
18" Super Jack/75° Satron LNB

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9904/70° LNB/990/24" Arm
$599.95

9995 Slave
$149.95

CLOSE OUT!
9' Dish with Cover
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UPS Shippable!

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Dacotah 13" Color T.V. w/Satellite Receiver - Low Band	359.95
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ST 710 Stereo Processor	119.95
ST 910 Slave Receiver	109.95
ST1010 Receiver	139.95
Block Down Converter	34.95

Regency

SR 3500
STEREO RECEIVER
Includes Block Down Converter
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GENERAL INSTRUMENT

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$129.95 6 lot

G.I. 1000 Remote Control with Stereo
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PROSAT

210
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Digital E & W
SATELLITE POSITIONER

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THE BEST LNA'S & LNB'S

	6 lot	1 lot
70° LNA	57.95	59.95
65° LNA	71.95	74.95
75° LNA	47.95	49.95

1 Year Warranty Overcounter Exchange

75° LNB	99.95
70° LNB	114.95

CALL FOR QUANTITY PRICING!
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Satron

Quality LNB's

950-1450

80° LNB	79.95
75° LNB	84.95
70° LNB	89.95
65° LNB	94.95
60° LNB	104.95
BDC 950-1450	39.95

Kaultronics

10X
$249.95

T10 Ku/C
$299.95

10½ Ku/C
$319.95

UPS Shippable Packages - 10' Kaultronics

Complete Systems!

Startech 3000	339.95	Amplica CSR 300A/24" Arm	699.95
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DX DSB 500/DSB 60 Block	519.95	*UST 7000/18" Arm	829.95
*UST 5000	579.95	DX DSB 800/DSB 60/24" Arm	999.95

(Packages Include: Polorotor, 75° LNA, 12" RG 213, 10' Kaultronics Antenna.)
**Includes 75° LNB; Add $25 for Chap Pol I*
Add $60 for T10 Kaul KU/C

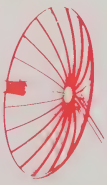
10' Aluminum Mesh

LUXOR 9' DISH
$239.95

MOST POPULAR SYSTEMS!

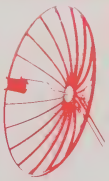
Startech 3000 Receiver
9' Kaultronics Dish
95° LNA
Polorotor

$299.95 2 lot
$319.95 Singles
(Good!)



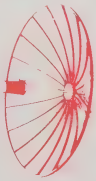
STS LSR/BDC
75° LNA/24" Arm
10' Kaultronics
Polorotor

$599.95 2 lot
$619.95 Singles
(Better!)



UST 7000/Arm
100° LNB
10' Kaultronics
Polorotor

$799.95 2 ot
$819.95 Singles
(Best!)



TRACKER VIII
75° LNB/18" BJ
T10 Kaultronics
Pico Rotor

$1595.95
(Ultimate!)

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$24.95 Case Lot
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Replacement Motors $14.95

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SPECIAL BUY!

81 Position Programmable Actuator/with 18" Arm With Remote Control

$159.95

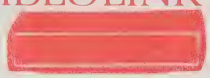
ESP INC.

TVRO FILTER

- ☐ PFG-30 $169.95
- ☐ PFG-40 $169.95
- ☐ PFG-50 $169.95
- ☐ PFG-134 $169.95
- ☐ PFG-510 $169.95

Removes Telesterial Interference

VIDEOLINK®



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TRANSFER USE OF REMOTE CONTROL OVER HOUSE

XL-106 $87.95
VIDEO REMOTE SWITCHER 4 IN - 3 OUT

RABBIT

The VCR Multiplying System

Works on Sat.
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$56.95 Singles

Includes 150 ft. Cable

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Call For Details!

WE SERVICE ALL SATELLITE RECEIVERS

DEMO'S

MAKE OFFER!

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UST 5000
UST 6000
UST 7000
STS LNB
LNA'S
MACOM POLOROTOR

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A SUBSIDIARY OF CONTAC CORPORATION

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Model 1000

2050 - Phone & Answering Machine 89.95
2300 - Voice Activated, Beeperless Remote 86.95
3100 - Beeperless, Vox Message, Dual Cassettes 109.95
3530 - Beeperless Remote, Personal Memo 104.95
3570 - Deluxe Telephone & Answerer, 10 No Dialer 144.95

D & H

9' Spun/Mt.	$329.95
9' Perf/Mt.	$369.95
5' Patio Perf	$159.95
5' Patio Spun	$139.95

Arc finder

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10' Aluminum 4 Piece
$249.95

Kaultronics
10' Aluminum 4 Piece
$209.95

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19¢ per foot - Dual Run RG 6
50 ft. to 100 ft. Assorted Lengths

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350 ft. Dual UPS	.35
1000 ft. Dual	.33
RG 59 1000 ft.	.07
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950-1450 BDC	39.95

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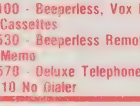
NEW!



TOTE VISION.

AC-DC VHS Player
$219.95 6 lot

AC VHS Player Only
$179.95 6 lot

Symphonic

VCS200
4 Event/14 Day Wireless Remote
$229.95 6 Lot
$239.95 Singles

AM/FM - AC/DC
4.5 CUBE T.V.
$58.95

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CZ-110 Stereo, 4½" Speakers
$19.95 6 lot
$21.95 Singles

Regency

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4 Ch. Xtal Scanner
$39.95 6 Lot

R1050
10 Ch. Scanner
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LAST CALL!

maxon

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$63.95 1 lot
$62.95 2 lot

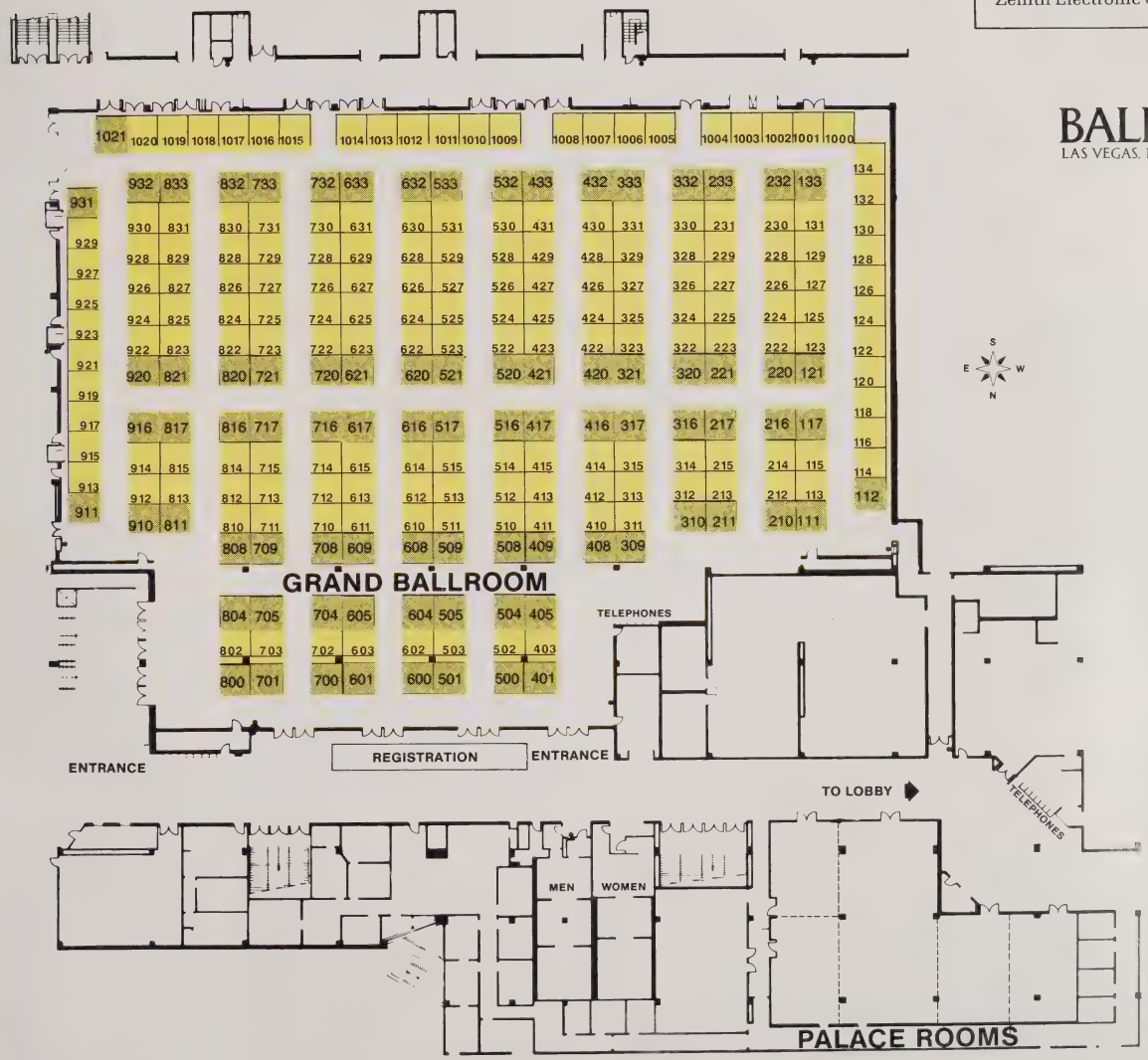
Compact Superhet
RD-2
$56.95 1 lot
$54.95 3 lot
Maxium Range Superhet

Pro Line T120

$2.59 100 lot
$2.69 50 lot
$2.89 10 lot

CALL 1-800-553-6340

EXHIBITOR	BOOTH #
Panasonic Industrial Co.	1526
Parabolic East, Inc.	1229
Paraclipse Inc.	1210
Peace Electronics	1100
Pentec	924
Phantom Engineering, Inc.	1304
Pico Products, Inc.	429
Prime Focus	923
Pro Brand International	1015
Prosat Communications Corp.	1223
PTS Corporation	702
Quik Rok, Inc.	714
Raydx Satellite Systems Ltd.	*532
RCA	1104
R.L. Drake Co.	910
Rockdale, Inc.	129
Rohn	223
RS & I	732
Satellite Broadcast Networks	1617
Satellite Earth Station	928
Satellite Relay	932
Satellite Technology Service	808
Satellite Test Equipment	919
Satellite Times, SuperGuide, OnSat, STV, Satellite Retailer	1725
Satvision, Inc.	112
SDM, Inc.	427
Showtime/The Movie Channel	1431
Sigma Communications	127
Signal Sources	700
Sky Touch Systems	913
Signal Technologies	1519
SMP	917
Spacecraft	415
Standard Industrial Products	325
Stereo Video Discount	1021
Suncor Communications, Inc.	508
Superstar Connection	432
Superwinch	327
SYS Industrial Of America, Inc.	114
Systems Development Corp.	1727
Tee-Comm	520
Thomson Saginaw, Inc.	216
Toner Cable Equipment	528
Transponder	514
Travel-Sat, Inc.	1205
Tsiger Planer, Inc.	1811
Turner Broadcasting	1332
TVRO Technology	225
Uniden Corp.	310
United TVRO Association	1726
Universal Antenna Mfg.	500
Video Directory	1106
Video Satellite Corp.	Dish Farm
Von Weise Gear Co.	403
Wagner Mfg.	1230
Western Publications	824
Winegard Co.	1541
Wing Enterprises	117
Yokowo America Corp.	1414
Zenith Electronic Corp.	1711



Industry Optimistic About 1987

By Bill Barr

TORONTO—After a short embargo, VideoCipher descramblers are now entering Canada, and dish industry leaders here cite the growing demand for the units to one thing: they believe 1987 will be the year TVRO comes of age.

Among the other reasons for optimism, they said, was that Cable News Network (CNN) is selling directly to TVRO owners here—an indication the electronic border will soon disappear.

Many in the industry said scrambling has come and gone and most Canadians envision satellite television reception as they view cable. Basic and premium service will eventually be offered, said Richard Hamblin, dealer chairman of the Satellite Communications Association of Canada (SCAC).

"If you want the basic package, you get these channels. If you want premium services, you have to pay extra," said Hamblin. "Programmers thought they could exclude Canadians from the satellite pay-TV revolution by scrambling."

Hamblin said they (programmers) underestimated the resolve of Canadians to get the programming they want.

Others expect many U.S. programmers to sell direct to Canadian TVRO subscribers this year.

"As long as the copyright fees are paid, it doesn't matter if you live in Upper Slabodia," said Brian Dinsdale, founder of Dinsdale Communications Corporation (DCC) of Toronto. "Who cares about the border?"

Now that the VideoCipher embargo has been lifted, distributors said they hope to market integrated receiver/decoders (IRDs) this year.

Two Canadian companies have signed contracts with General Instrument Corporation (GI) to produce an IRD unit: Platinum Communications and Tee-Comm Electronics Inc. Sources at both companies told *Satellite Times* they think it is impossible to stop the IRD units from being sold here. ❑

TIMES CALENDAR

March

2-4 SBCA/STTI Show
Bally's Grand Hotel
Las Vegas
Contact: Rick Schneringer
(800) 654-9276

5 UCLA School of Law Seminar on Protecting Film and TV Rights in the World Satellite Marketplace
Beverly Hilton Hotel
Beverly Hills, CA
Contact: Doris Davis
(213) 206-0534 or (213) 825-6211

10-12 Jerrold Technical Seminar
Sheraton Fredericksburg Resort
Fredericksburg, VA
Contact: Jerry McGlinchey
(215) 674-4800

13-17 International Communication Satellite System Conference
Hyatt Regency Hotel
Crystal City, VA
Contact: Denis Curtin
(202) 863-6111

23-25 North Central Cable Television Association Annual Convention
Radisson St. Paul Hotel
St. Paul, MN
Contact: Mike Martin
(612) 641-0268

25-27 Virginia Cable Television Association Annual Convention
Homestead Hotel
Hot Springs, VA
Contact: Lorraine Whitmore
(804) 780-1776

28-31 National Association of Broadcasters Annual Convention
Dallas Convention Center
Dallas
Contact: Hank Roeder
(202) 429-5356

29-31 Cable Television Advertising Bureau Annual Convention
Waldorf-Astoria Hotel
New York City
Contact: Vince Fazio
(212) 751-7770

April

2-5 Society of Cable Television Engineers' Cable Tec Expo
Hyatt Orlando
Orlando, FL
Contact: Anna Riker
(215) 363-6888

5-6 1987 Consumer Electronics Legal Conference
Marriott Hotel
Washington, DC
Contact: Beverley Johnson
(202) 457-8706

9-10 Satellite Communications Status '87
Halloran House
New York City
Contact: Susan Smith
(212) 233-1080

May

3-6 Canadian Cable Television Association Annual Convention
Montreal Convention Center
Montreal
Contact: Christiane Thompson
(613) 232-2631

17-20 National Cable Television Association Annual Convention
Las Vegas Convention Center
Las Vegas
Contact: Dan Dobson
(202) 775-3606

27-30 International Television Association Annual Conference
Washington Hilton
Washington, DC
Contact: Inez W. Wehrli
(214) 869-1112

May 30-June 2 International Summer Consumer Electronics Show
McCormick Place
Chicago
Contact: Linda Jordan
(202) 457-8700

June

22-24 Satellite Symposium '87
Skyline Hotel
Toronto, Canada
Contact: Bennett Schaub
(416) 299-6184

August

16-19 Cable Television Administration and Marketing Society Annual Meeting
Fairmont Hotel
San Francisco
Contact: (202) 371-0800

Aug. 30-Sept. 1 Southern Cable TV Association's Eastern Cable Show
Merchandise Mart
Atlanta, GA
Contact: Lorraine Whitmore
(804) 782-9501

September

7-9 SBCA/STTI Show
Opryland Hotel
Nashville, TN
Contact: Rick Schneringer
(800) 654-9276

October

6-8 Atlantic Cable Show
Convention Center
Atlantic City, NJ
Contact: Jean O'Donnell
(609) 848-1000

Those companies or organizations wishing to have events listed in the calendar should send the date, time, location, contact person, and phone number to: **Satellite Times, 551 National Press Building, Washington, DC 20045 or call (202) 662-8820.**

1987 MAJOR SHOWS

March

2-4 SBCA/STTI Show, Bally's Grand Hotel, Las Vegas. Contact: (800) 654-9276.

28-31 National Association of Broadcasters Annual Convention, Dallas Convention Center, Dallas. Contact: (202) 429-5356.

29-31 Cable Television Advertising Bureau Annual Conference, Waldorf-Astoria, New York City. Contact: (212) 751-7770.

May

17-20 National Cable Television Association Annual Convention, Las Vegas Convention Center. Contact: (202) 775-3606.

25-28 Canadian Satellite Users Conference, Ottawa Congress Center. Contact: (613) 746-5920.

May-June

May 30-June 2 International Summer Consumer Electronics Show, McCormick Place, Chicago. Contact: (202) 457-8700.

September

7-9 SBCA/STTI Show, Opryland Hotel, Nashville, TN. Contact: (800) 654-9276.

Dinsdale Starts New Company

TORONTO—Brian Dinsdale, TVRO product manager for Tee-Comm Electronics Inc., has left the firm to begin his own company.

Dinsdale attributed his departure to last year's merger of Tee-Comm and Banvil Ltd., which was one of Canada's largest TVRO distributors (See *Satellite Times*, July 23, 1986).

"I felt we had to part company," Dinsdale said, referring to Tee-Comm. "Since the merger, Tee-Comm has too many product managers."

Dinsdale, a former M/A-Com and RCA employee, was

Continued on next page

Norsat, GTE Sign Receiver Deal

By Bill Barr

McLEAN, VA.—GTE Spacenet Corp. has awarded a contract to Norsat International Inc. of Surrey, British Columbia, to design and supply satellite receivers and ancillary equipment for use in 2,100 K mart stores.

Norsat is a public company, is traded on the Vancouver Stock Exchange, and is one of the leading distributors of satellite equipment in Canada. Norsat receivers, LNAs and LNBs are manufactured by Japan Radio Co. (JRC).

K mart will install a corporate video and data communications network, which the company has dubbed, Skystar, using very small aperture terminals (VSATs).

The Skystar system will allow K mart to transmit computer-to-computer corporate data on pricing, specials, and other promotions via satellite from a central location, the companies said. The system will cost less than conventional land line or terrestrial microwave communications, they added.

GTE Spacenet, a subsidiary of the GTE Corporation, currently operates two hybrid C/Ku-band satellites (Spacenet 1 and 2) and two high-powered Ku-band satellites (GSTAR 1 and 2). In addition, the company has three satellites under construction.

Locally, Norsat manufactures a line of commercial satellite receivers for use in satellite master antenna (SMATV) applications.

In related news, Norsat recently appointed William N. Grant to its board of directors. Grant is president and chief executive officer of FraserFund Venture Capital, and chairman of Newtec Industries Ltd. He is also a director of the Canadian Manufacturers Association (CMA). ❑

Dinsdale

Continued from previous page

instrumental in establishing Banvil.

His new company, called Dinsdale Communications Corporation (DCC), is located near Toronto International Airport.

"I believe I can build a credible distribution company to service the dealers in the old-fashioned way, with products and service they want—the way we used to at Banvil," said Dinsdale.

Dinsdale is chairman of the Satellite Communications Association of Canada (SCAC), an industry trade association.

Indications are Tee-Comm is not planning to replace the TVRO product manager's position vacated by Dinsdale.

Tee-Comm maintains nine locations in seven Canadian provinces, as well as a telephone component manufacturing subsidiary in Atlanta, Ga. ❑

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This form must be received by CompuSystems no later than Friday, May 8, 1987, in order for your badge to be mailed to you. **Attach your business card or company letterhead to assure prompt processing.** If received after May 8 and before May 20, 1987, please pick up your badge on-site, after showing two forms of ID, at the 1987 Summer CES "Will Call" Desk located in the Main Registration Area at McCormick North. **To register more than one qualified individual, please duplicate this Advance Registration Form and attach a business card for each individual.** Complete Show information, including housing form, will be sent separately.

Circle No. **174** on Reader Service Card

Future of DBS Discussed at Seminar

By David Bross

WASHINGTON—Whether the direct-to-home satellite broadcasting industry will migrate to Ku-band transmission in the near future was among the key topics discussed at a recent conference here sponsored by Phillips Publishing Inc.

Wilbur Pritchard, president, Direct Broadcast Satellite Corp. (DBSC), said despite the cable industry's efforts to prevent DBS in general, "It's happening." He added DBS is "flourishing miraculously despite predictions from the critics."

Although the majority of cable and network programs now use C-band, David P. Beddow, vice president and general manager of Comsat Video Enterprises, said, "With Ku-band, you can receive the [satellite] transmissions with a smaller TVRO antenna."

Beddow later reiterated to *Satellite Times* that HI-Net, Comsat's Ku-band delivered hotel/motel satellite programming service, is interested in expanding into the home DBS market.

Currently, HI-Net is providing service to 1,151 hotels with another 1,400 under contract, he said. Comsat recently agreed to buy the 50 percent of HI-Net it did not own from Holiday Corp. (See *Satellite Times*, Jan. 14, 1987).

Beddow said informal talks to transmit the Cable News Network (CNN), Showtime, ESPN, the Disney Channel, and The Nashville Network to direct home subscribers were proceeding. Formal negotiations were expected to begin later this year, he added.

However, as reported, several of the programming services currently involved with HI-Net have recently told *Satellite Times* they have not sold direct-to-home rights to their programming to HI-Net and are doubtful they will change that policy in the near future.

Not everyone at the two-day summit was singing Ku-band's praises. Steve Schulte, senior vice president, direct broadcast development, Showtime/The Movie Channel Inc., said C-band direct service is "alive and well" and is "the darling business of the 1980s."

Schulte was countered on the panel by consultant Michael Alpert, who argued the cable industry was "exercising its influence to impede" DBS' development.

Alpert said cable operators have told programmers if you "go on DBS, we'll take you off of our [systems]." Cable MSOs bought an interest in Turner Broadcasting System Inc. "to control competition and prevent it [Turner] from [going] DBS," he said.

Schulte responded by saying the Federal Communications Commission and Department of Justice are investigating such claims and to date have not found any substantiating evidence to support the allegations. ❑

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Satellite Times

TV Guide
January 24, 1987

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Patrick to Succeed Fowler

WASHINGTON—The Reagan Administration has announced it intends to nominate Dennis R. Patrick to succeed Mark Fowler as chairman of the Federal Communications Commission.

Patrick, a current commissioner, will take Fowler's place later this year. Fowler announced his resignation last month, after serving as chairman for six years (See *Satellite Times*, Feb. 14, 1987).

Patrick and fellow Commissioner Mimi Weyforth Dawson were generally considered to be the two front runners to succeed Fowler.

Many observers here now expect Dawson to leave the commission, with some speculating she will be offered another post within the Reagan administration.

Patrick joined the FCC in late 1983 and has been viewed as a close ideological and political ally of Fowler. He is a protege of William P. Clark, a close ally of the President and a former national security advisor.

At press time, no replacement for Fowler's seat on the commission had been named, although several names have been circulating through the rumor mill here.❑

FCC to Reconsider Programming Rules

WASHINGTON—The Federal Communications Commission, at its Feb. 12 meeting, announced its plans to begin a study on the impact of the compulsory copyright license which allows common carriers to uplink broadcast stations to cable systems and strongly suggested it will recommend that Congress eliminate the license.

In addition, the FCC said it plans to enact rules which would effectively allow broadcast stations to buy syndicated programming on an exclusive basis, preventing superstations and cable systems (or others) from showing the programming within a broadcaster's market.

There is widespread agreement that the elimination of the compulsory license and implementation of syndication exclusivity would threaten the existence of cable's well-known superstations.

The FCC acknowledged it does not have jurisdiction over the compulsory license, and opinion varies on how much influence the commission's recommendation would have on Congress.

For example, Rep. Robert Kastenmeier (D-Wis.), chairman of the House subcommittee with jurisdiction over copyright matters, recently told *Satellite Times*, "I don't see it [repeal of the license] likely to occur in 1987."

After the meeting, the cable industry once again voiced its opposition to the elimination of the compulsory license and the reimposition of so-called syndicated exclusivity and network nonduplication rules.❑

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Gain ..... 62 dB Minimum
Gain Flatness ..... +/-1.5 dB/500 MHz Maximum
Input V.S.W.R. ..... 3.0:1 Typical
Output V.S.W.R. ..... 2.0:1 Typical
DC Power Voltage ..... +14 to +28 VDC
Input ..... Circular Waveguide Horn

CSF42156-B

SINGLE LNBF

Input Frequency ..... 3.7 to 4.2 GHz
Output Frequency ..... 950 to 1450 MHz
Noise Temperature @ 25°C ..... 85°K or Lower
Gain ..... 62 dB Minimum
Gain Flatness ..... +/-1.5 dB/500 MHz Maximum
Input V.S.W.R. ..... 3.0:1 Typical
Output V.S.W.R. ..... 2.0:1 Typical
DC Power Voltage ..... +14 to +28 VDC
Input ..... Circular Waveguide Horn

CN40115A

LOW NOISE AMPLIFIER

Frequency ..... 3.7 to 4.2 GHz
Gain ..... 50 dB Typical
Noise Temperature ..... 85°K or Lower
Input V.S.W.R. ..... 2.5:1 Typical
Output V.S.W.R. ..... 1.5:1 Maximum
DC Power Voltage ..... +14 to +28 VDC
LED Power Indicator ..... Standard
Lightning Protection ..... Standard
Connector Type ..... Type N Female

CS42095BA (430-930 MHz) CS42146B (900-1400 MHz) CS42145B (930-1430 MHz) CS42155B (950-1450 MHz)

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Output Frequency ..... Various Available
Noise Temperature @ 25°C ..... 85°K or Lower
Gain ..... 62 dB Minimum
Gain Flatness ..... +/-1.5 dB/500 MHz Maximum
Input V.S.W.R. ..... 3.0:1 Typical
Output V.S.W.R. ..... 2.0:1 Typical
DC Power Voltage ..... +14 to +28 VDC

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Gain ..... 0 to -3 dB Typical
Gain Flatness ..... +/-1 dB Maximum
Isolation between Receivers ..... 55 dB Minimum
Isolation between H and V ..... 20 dB Minimum
Control Voltages to S1, S2 ..... For use with P1 Type Controllers
Pulse: 1msec, 5 volts switches to V-LNA
Pulse: 2msec, 5 volts switches to H-LNA
Voltage Requirements ..... +14 to +28 VDC
V.S.W.R. from all ports ..... 1.5:1 Typical

CS09HV5D (400-950 MHz) CS15HV5D (900-1450 MHz)

DUAL POLARITY SWITCH

CS09HV5D Frequency ..... 400 to 950 MHz
CS15HV5D Frequency ..... 900 to 1450 MHz
Gain ..... 0 to 5 dB Typical
Gain Flatness ..... +/-2 dB Maximum
Isolation between Receivers ..... 30 dB Minimum
Isolation between H and V ..... 40 dB Minimum
Control Voltages to S1, S2 ..... For use with P1 Type Controllers
Pulse: 1msec, 5 volts switches to V-LNB
Pulse: 2msec, 5 volts switches to H-LNB
Voltage Requirements ..... +15 to +28 VDC
V.S.W.R. from all ports ..... 1.5:1 Typical

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Passband Gain ..... -4 db Minimum
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Output V.S.W.R. 1.5:1
DC Voltage ..... +14 to +28 VDC
DC Current ..... 50 mA Maximum
Connector Type ..... Type N Female

4 WAY ISOLATED POWER DIVIDER
C4010-4A

Frequency ..... 3.7 to 4.2 GHz
Gain Flatness ..... +/-1 dB Maximum
Passband Gain ..... -7 dB Minimum
Input V.S.W.R. ..... 2.2:1 Maximum
Output V.S.W.R. ..... 1.5:1 Maximum
DC Voltage ..... +14 to +28 VDC
DC Current ..... 50 mA Maximum
Connector Type ..... Type N Female

2 WAY POWER DIVIDER
C4010-2

Frequency ..... 3.7 to 4.2 GHz
Isolation ..... 20 dB
Insertion Loss ..... 3.5 Maximum
Input V.S.W.R. ..... 1.5:1 Maximum
Output V.S.W.R. ..... 1.5:1 Maximum
Connector Type ..... Type N Female

4 WAY POWER DIVIDER
C4010-4

Frequency ..... 3.7 to 4.2 GHz
Isolation ..... 20 dB
Insertion Loss ..... 7 Maximum
Input V.S.W.R. ..... 1.5:1 Maximum
Output V.S.W.R. ..... 1.5:1 Maximum
Connector Type ..... Type N Female

Frequency ..... 3.7 to 4.2 GHz
Insertion Loss ..... .25 dB Maximum
Input V.S.W.R. ..... 1.3:1 Maximum
Output V.S.W.R. ..... 1.3:1 Maximum
Connector Type ..... Type N Female

Frequency ..... 3.7 to 4.2 GHz
Gain Flatness ..... +/-1 dB Maximum
Passband Gain ..... -6 dB Minimum
Input V.S.W.R. ..... 2:1 Maximum
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Prism

Prism has promoted **Thomas J. Ferraro** to marketing director, **Ellen Weinberg** to affiliate marketing manager, **Patricia McGarvey** to marketing coordinator, and **Terri D. Morse** to product manager.

In his new post with the regional sports and movie pay television service, Ferraro will supervise all aspects of the marketing department, advertising programs, and affiliate relations.

Ferraro previously was Prism's affiliate marketing manager. Prior to joining the company, Ferraro worked with Group W Manhattan Cable TV as a sales representative.

Weinberg will be responsible for serving affiliate cable systems in New Jersey and western Pennsylvania. Prior to joining Prism, Weinberg worked for SBK pictures.

In her new position, McGarvey will provide support services for the marketing department and the company's 87 affiliates.

Morse will develop and implement all marketing programs and will coordinate corporate communication with Prism's affiliates. Morse previously worked at Telerep Inc.

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CableData

Gerald S. Knapp

Gerald S. Knapp has been named president of CableData, a major provider of computer services to the cable television industry.

Knapp joined CableData in 1973, as vice president of finance, and has served as senior vice president of administration and treasurer. He also serves on the company's board of directors.

The chairman and founder of CableData, **Robert J. Mathews**, will now focus on the development of new products and opportunities for the company, the firm said.

TCI

Tele-Communications Inc. (TCI) has appointed **Robert Thomson** to the post of vice president of government affairs.

Thomson will represent TCI's position on legislative and regulatory affairs and coordinate the promotion of C-SPAN programming on TCI's systems.

Prior to joining TCI, Thomson served as a governmental affairs director for Moore McCormack Resources Inc. He also served in the Carter administration as a special assistant on budget matters.

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Markey Committee May Hold TVRO Hearing

WASHINGTON—The House Telecommunications Subcommittee may hold a hearing on TVRO/scrambling related matters this spring or summer, according to David Moulton, the subcommittee's new senior counsel.

In addition, Moulton said, it is possible the subcommittee will hold an oversight hearing, on the impact of the Cable Communications Policy Act of 1984.

Both issues, he said, are ones "people will want to have major hearings on."

However, Rep. Edward Markey (D-Mass.), the new chairman of the subcommittee, did not mention TVRO in one of his first speeches since being elected to the post.

Asked for his views on TVRO issues after the speech, Markey told *Satellite Times*, "I'm still thinking about that."

During a recent panel session here, Moulton said Markey and others in Congress were "very sympathetic" with the plight of TVRO owners.

But, he added, Markey "just did not support" the approaches to TVRO problems offered by the various bills introduced last year—most notably measures which would have mandated regulation of subscription prices. ❑

SBCA Public Affairs Committee Meets

The Public Affairs Committee of the Satellite Broadcasting and Communications Association (SBCA) met in Lexington, Kentucky, on Feb. 17, in conjunction with the Kentucky Satellite Dealers Association.

According to Jerry Fischette, SBCA vice president, operations, approximately 65 people were in attendance at the meeting. TVRO dealers from Kentucky, Ohio, Tennessee, and Indiana attended the meeting, he added.

Representatives of Luxor (N.A.) Corp., DX Communications Inc., Showtime/The Movie Channel Inc., Hughes Communications Inc., Home Box Office Inc., and General Instrument Corp. attended the meeting and addressed the group, said Fischette.

Gordon Main, chairman of SBCA's retailer group, and SBCA President Chuck Hewitt addressed the gathering. Hewitt appeared via satellite, speaking from the studios of CBN Cable Inc. in Washington.

The speakers provided the dealers with a general update on TVRO/programming matters, with questions centering on "third party [programming] packaging, and the price of programming," said Fischette.

Overall, he added, "It was a good meeting, very informational." ❑

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Chips

Continued from page 1

one service is legitimately paid for.

Cooper, speaking from the island, said any suggestion he was part of Rabbit was "absolute hogwash." In fact, Cooper said, he would prefer Rabbit to leave the island in order to prevent anyone from thinking he is a part of the company.

Last January, Cooper organized three so-called "Descrambling Summits" on the island. Participants in the summits have all been questioned by the U.S. Customs Service because the chips they carried were suspected of assisting in the unauthorized reception of pay-TV signals.

- X-Act, a Canadian TVRO dealership run by Peter Hansen. The company is controlled by Ed Grotsky, owner of Arunta Engineering, a TVRO manufacturing company based in Phoenix. X-Act also distributes "Three Musketeer Chips."

Several in attendance at one of the descrambling summits said they saw Grotsky selling the chips. Grotsky acknowledged being at the summit, but said the chips in question were updated chips for his company's satellite receiver.

"As far as attempts to break the VideoCipher, I welcome them," he said. "I'd like to be a key player, but I'm not."

- Integrated Digital Systems (IDS), which is located outside Toronto. IDS is owned by John Davidson, also a principal in Westar Technologies, a firm which has been heavily involved in attempts to break the VideoCipher and Oak-Orion scrambling system.

IDS also sells the "Three Musketeer" chip.

Davidson could not be reached for comment.

Complicating the relationship between the chip sources is the involvement of Shaun Kenny, host of the "Boresight" program.

Boresight has used much of its air time in recent months discussing, promoting, demonstrating, and encouraging sales of underground descrambling chips.

According to the sources, Kenny has been receiving payment from all three chip sources, in one form or another, for some time.

X-Act pays him $16 to $18 for every chip it sells, whether or not the sale can be traced to Boresight or not. Rabbit has made payments to Kenny as well, though it is not clear at what rate. Cooper has been a regular contributor to Boresight.

IDS was making payments to Kenny in lump sums for several months, until Davidson ended the practice. That is why, sources said, Kenny recently questioned whether the IDS chips worked and urged viewers to buy the X-Act model.

Telephone calls to Kenny were not returned.

In addition to the acrimony between the personalities involved, the veil of secrecy in the hacker underground may be cracking because of GI's attempts to deauthorize users of the chips.

GI's biggest move occurred on the evening of Feb. 13, when it managed to electronically deauthorize most, if not all, of the "Three Musketeers" and offshoots of it which capitalize on the tiering aspects of the VideoCipher software.

If an unauthorized chip was in place, the screen went to black and a superimposed warning message and the box's address number appeared.

All field reports indicate GI's move did not affect true clone chips—units which are replicas of legitimate authorization chips to specific channels.

Within 48 hours, IDS customers were being told updated chips, which defeated GI's countermeasure, were in the mail.

GI, seeking to exploit the confusion in the marketplace, announced it would offer any owner of a VideoCipher that has been tampered with the opportunity to return the box for repair—free of charge (except postage and handling), no questions asked.

The amnesty offer expires on March 15, GI said.

GI continues to attempt to deauthorize other chip sets in distribution, said spokeswoman Cheri Hart.

Hart acknowledged GI was deauthorizing all services being viewing via underground chips, including the ones legitimately paid for. She said the Cable News Network was extending subscriptions to its services for one month for all those who ship their boxes back to GI.❑

TBS

Continued from page 1

paign.

According to Marty Lafferty, TBS vice president of direct broadcast sales, the company's programming subsidiary—Discount Satellite Programming Inc.—has signed deals with: Arts & Entertainment, Black Entertainment Television, CBN Cable Network, Country Music Television, the Discovery Channel, ESPN, Financial News Network, Hit Video USA, the Nashville Network, Netlink USA (for its six Colorado superstations), Satellite Broadcast Networks (for its three network affiliates' signals), United Video (WGN, KTVT, WPIX), TEMPO Television, USA Network, the Weather Channel, and WOR's carrier, Eastern Microwave Inc. (EMI).

The Cable News Network, CNN Headline News, and WTBS, which are owned by TBS, are also in the package.

Until now, EMI has said it could not serve TVRO owners because of copyright law limitations. WOR's signal has been scrambled for almost a year.

Lafferty would not comment on why Eastern Microwave changed its mind, though sources said TBS may have agreed to assume EMI's potential liability for serving TVROs.

At press time, sources said it was possible TBS would announce packaging agreements with Amway Corp. (for SelecTV), Request TV (a pay-per-view service) and X-Press (a data delivery service). Those services are not expected to be part of the Tracker-Echosphere promotion.

Lafferty said the TBS package would only be sold as part of the hardware campaign for the time being. "Hopefully, later this spring we will go beyond the scope of this initial promotion," he said.

He would not elaborate on what the price of the TBS package will be, though sources said Lafferty has told colleagues he hoped the package would sell for approximately $100 a year.

Commenting on the joint promotional effort between the three companies, Lafferty said, "Our promotion hails a turning point for the industry. It eliminates the need for a separate descrambler. And it also delivers the much anticipated package of programming with more than 20 channels from one source."

IRD units sold as part of the promotion will be preauthorized, Lafferty said, with Cabletek—a major subscriber services firm—handling much of the process.

If the programmers participating in the promotion agree to be part of TBS' permanent package, the company would have the largest such package to date.

However, with 14 common carrier supplied stations in the package, any ruling against the uplinkers on the controversial issue of TVRO subscriptions to superstations could greatly reduce the number of channels offered.

Houston Tracker's two current IRD models sell for a suggested retail price of $1599 and $1999. Echosphere's Echostar TVRO systems with IRDs sell for $2000, $2499, and $2999.

Some TVRO industry executives said Echosphere was preparing to reduce the price on its lowest cost IRD system (the 4000) and may even announce as much at the show.

In recent weeks, questions have been raised about the relationship between Tracker and Echosphere in light of Tracker being bought by a group of investors which included Echosphere President Charlie Ergen (See *Satellite Times*, Jan. 14. and Jan. 28, 1987). ❑

Dumping

Continued from page 1

as they usually do from their normal outlets, he said.

Then the buyers "have to concentrate their selling efforts on the product they've bought cheap," added Gonzalez.

Estimates vary on how much dumped product was on the market in 1986. Hans Giner, president of Luxor (N.A.) Corp., said he believed 15 percent, or 37,500, of the approximately 250,000 units sold were dumped products.

"The long-term implication is we still will not see a profitable business until we see the end of this," he said.

Luxor was widely perceived to have contributed one of the biggest dumps of the year, when it sold a large amount of equipment to a Midwest distributor which specializes in liquidations.

But Giner called the move "inventory clearance" and not a dump, arguing it involved "old equipment."

Delta's Sandy Wirth prefers to call dumped product "distressed merchandise" and says overly optimistic projections for 1986, based on 1985 sales, caused too much product to be manufactured.

"You cannot keep distressed merchandise out of the marketplace," he said. "So if its going to come in, it makes the best sense to give the opportunity for profit to the normal dealers than to K mart."

Ace Hoyt, of Cincinnati Microwave Communications Inc. (CMC), one of the more vocal critics of dumping, said it causes all manufacturers to lower their prices and could lead to some selling product at barely over cost.

"If you start getting into that game, you're dead meat," he said.

There is general agreement among executives that the dumping craze of 1986 may have run its course. But, most cautioned, while rebounding TVRO sales are the best remedy for dumping, slumping sales are the most ready cause.❑

Show

Continued from page 7

million this year, according to Hewitt, some board members predicted a heated meeting is on tap as the various factions seek to funnel funds for specific activities and programs.

Hewitt said the SBCA hoped to take in more than $1 million this year, adding the group has passed its goal of having 40 executive member companies (it has 43) by the show.

A number of companies are expected to make important announcements at the show, according to industry executives:

• HBO will elaborate on its plans for its free preview weekend March 14 and 15. The company will uplink an unscrambled signal on Galaxy 2 and offer TVRO owners a VideoCipher descrambler for $299 when bought in conjunction with a $179.55 dual annual subscription to HBO and Cinemax.

• At press time, Showtime was still attempting to finalize plans to update the industry on its plans to market a TVRO programming package. If Showtime does make its announcement, it is possible it would also unveil a new pricing structure for its basic package (which is now set at $10 per month) when bought with its pay services.

Showtime does plan to announce the launch of a new promotional campaign, called "The Sky's the Limit," which will offer consumers who enter TVRO showrooms free trips, cash and/or equipment prizes. TVRO dealers will also be able to participate in a simultaneous sweepstakes.

Showtime's contingent to the show was to be headed by Tola Murphy-Baran. On Feb. 21, Steve Schulte, head of Showtime's TVRO project, broke his leg in a skiing accident and was expected to be out of action for several weeks.

• Amway Corp. was scheduled to hold a press conference to discuss its latest strategies on marketing SelecTV to home TVRO owners. No price change in the service was expected, though the company plans to announce it will offer dealers commissions on renewals. Amway may also reveal the progress it is making on its efforts on TVRO packaging.

•Luxor (N.A.) Corp. was scheduled to announce its plans for marketing equipment direct to TVRO dealers. The company was also planning to unveil several new products.

• Satellite Broadcast Networks Inc. (SBN) was scheduled to announce the beginning of full-time fixed-key scrambling as the show opened. SBN was also planning on updating the industry on its recent legal battles.

• Several companies may announce joint hardware/software promotional campaigns at the show. Two TVRO distributors, Satellite Receivers Ltd. and Warren Supply Co., are working with programmers on putting together such a campaign.

Hewitt said the SBCA expects approximately 450 booths to be occupied at the show, with some 7,000 people in attendance.

The attendance of one person has become a controversial topic in recent weeks, after the SBCA informed Shaun Kenny, of "Boresight," he would not be given press credentials because of his involvement with attempts to break the VideoCipher descrambling system.

Boresight was refused a booth on such grounds (See *Satellite Times*, Jan. 28, 1987), but Kenny continued to request press accreditation.

STTI received a letter from Kenny's lawyers denying Kenny's involvement with the VideoCipher hacker movement and reiterating the request for credentials.

Hewitt said Kenny will be given press credentials because "we don't want to make it an issue."

There has also been some discussion that Kenny and some of his compatriots would hold a meeting at another hotel in Las Vegas to discuss industry matters. ❑

FTC

Continued from page 1

study into the state of the TVRO industry found "that distribution mechanisms for [TVRO] programming appear to be developing in a competitive way."

During the commission's Feb. 12 meeting, Chairman Mark Fowler repeated his views the TVRO marketplace was developing satisfactorily.

In drawing its conclusions, the FCC said "the marketplace seems to have settled on a de facto" descrambler standard in the VideoCipher II.

The commission said attempts to break the VideoCipher "are being combatted by both legal and technical means."

Subscription fees for home TVRO owners are "comparable to those available to cable subscribers" and it "is anticipated that more discount programming packages will develop," the FCC said.

The three television networks are "legally entitled" to scramble their signals, said the FCC, even though encryption "will limit service available to a small fraction" of TV households.

Though the commission's conclusions were of little surprise to most observers here (See *Satellite Times*, Jan 28, 1987), the FCC did surprise many by announcing it would not release a final report until next year.

Three internal quarterly reports on TVRO matters will be written, with a final public report expected to be completed by Feb. 1988, according to the FCC.

The decision on withholding the final report was a last minute development, according to sources here, which stemmed from the dissatisfaction of at least two FCC commissioners with earlier drafts of the report.

"I think it's fair to say the staff took a somewhat more conclusionary (sic) line than a couple of the commissioner's offices did," said an FCC source.

Two sources here indicated FCC Commissioner James Quello—and possibly colleague Mimi Weyforth Dawson, were prepared to vote against acceptance of the report if changes had not been not made.

Dawson's office, the sources said, came up with the idea of continuing the monitoring effort before drafting a final report to Congress—with Quello and Commissioner Patricia Diaz Dennis quickly endorsing the proposal.

Quello and Dawson alluded to their concerns during the open meeting, with Quello saying "we still have a problem here."

Dawson, who noted she initially questioned the need for the study, said she "would not want anyone to get the impression that there are not problems" in the TVRO marketplace.

Both, however, said there was no evidence at the moment that government regulation of the programming industry was necessary.

At press time, the FCC had not released the full text of its TVRO study.

The FCC's decision to continue its study was apparently of little consolation to Gore and TVRO industry interests here.

Many members of the TVRO industry have argued Fowler's often stated views there were no significant problems surrounding the development of the TVRO industry raised serious questions about the study's objectivity (See *Satellite Times*, Nov. 26, 1986).

Fowler cancelled a scheduled interview with *Satellite Times* at the last minute because of unexpected developments on local telephone rate issues.

Gore referred to such criticism in his letter to the FTC. The commission's decision, he wrote, "reflects Chairman Mark Fowler's stated, prejudiced opinion last year—before any inquiry begun—that the marketplace is working..." The commission's "judgement provides no reasonable answer to the public policy questions involved in this new industry," Gore wrote.

Gore's office, along with other TVRO industry supporters on Capitol Hill, have been considering the idea of getting the FTC involved in dish industry questions for several weeks (See *Satellite Times*, Jan. 28, 1987).

Richard L. Brown, vice president and general counsel of the Satellite Television Viewing Rights Coalition, said one of the reasons to ask for an FTC investigation is Fowler's views on the TVRO market.

"To say that Fowler prejudged the study would be a compliment because he obviously hasn't studied the issues at all," said Brown.

"The FCC conclusion that the marketplace is working is balderdash and bunk and will only fool a few people for a short period of time," he added.

In his letter to the FTC, Gore said programmers are selling their service to TVRO owners "at rates that do not reflect cost" and are "often higher than the charges to local cable" subscribers.

Gore attributed the programmers' practices to MSO "demands" and "vertical integration and cross-ownership" in the cable and programming industries.

Gore called the VideoCipher an "expensive decoder" and said "it has become extremely difficult to buy a decoder at any price—they are only available if a dish owner pays an inflated charge that reflects a severe shortage of supply, created for reasons unknown."

At press time, an FTC spokesman said the commission had not had a chance to review Gore's letter and would defer comment to a later date.

Brown said the TVRO industry's legislative efforts would not be affected by the FCC's report. He said the request for an FTC report would not shift the coalition's efforts away from Capitol Hill.

The cable industry praised the commission's decision. In a prepared statement, James P. Mooney, president of the National Cable Television Association, said, "We welcome and applaud the Commission's comments" on TVRO-related matters. ❑

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